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ABSTRACT

This experiment attempted to alter the effects of race as a diffuse status characteristic. Black subjects were given instructions meant to induce "high competence" on a task performed with white subjects. All subjects were seventh and eighth graders who did not know each other prior to the experiment. Each group comprised two white and two black subjects, matched on socioeconomic background and attitude toward school. Subjects were run under three conditions. In the "Long Experimental Condition," the boys played a round of a game, the black subjects received training via a superior film before doing the group task; the subjects then played the game again. In the "Control Condition" both the blacks and whites saw a less helpful film prior to the task. In the "Short Experimental Condition" the first round of the game was omitted. The results indicated that "Expectation Training" did not improve the activity or influence rate of black subjects as compared to their white partners. The pattern of white dominance is a consistent and persistent finding in this series. Alteration of this pattern will require a precise and powerful experimental intervention. [Not available in hard copy due to marginal legibility of original document.] (Authors/JM)

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TECHNICAL REPORT NO. 2

EXPECTATION TRAINING I: ALTERING THE EFFECTS OF A RACIAL STATUS CHARACTERISTIC*

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CHAPTER I

MANIPULATION OF COMPETENCE

How can we alter the tendency of lower status people to behave in a passive and incompetent manner when working jointly on a valued task with people of higher status? This problem is of considerable theoretical and practical interest. In our desire to integrate ethnic and racial groups for education, work situations or for negotiation of difficulties, we are bedevilled by the persistence of stereotyped ideas about inferiority and superiority, carried around in the heads of high and low status participants. Even though we design experiences which demand equal participation and which do not require specific cultural or educational background, the expectations from the general social order infect the new situations; the individuals leave, much as they entered, with their pre-existing belief systems about themselves and others, only reconfirmed.

With the aid of status characteristic theory (Berger, Cohen, and Zelditch, 1966) we describe the problem in the following way: When whites and blacks work together on a cognitive task which is new to the participants but is regarded as important, both races are likely to be handicapped by a built-in expectation for superior performance and greater participation on the part of the whites as compared to blacks. Even with no prior knowledge of the capabilities of the individuals involved, there is a diffusion from the most general societal principle

of superior-inferior relationships of Negroes and whites. What makes the problem such a difficult one to attack is the self-fulfilling nature of the interaction process; the white expects the black to participate on a lower level in quality and quantity; the black accepts the white's evaluation of him as less capable and therefore fulfills these very expectations of inferiority thus proving to himself and to the white that he cannot participate in an important task on a truly equal status basis. We have named this phenomenon "Interracial Interaction Disability." If we are correct in describing this problem in relationships between racial groups, then the sheer integration of schools or retraining of workers for higher status jobs, or setting up of dialogue or negotiation situations to settle racial crises, will not be effective. Even if the group task is some work or problem which the low status people have had no chance to feel disadvantaged about, the diffuse status characteristic problem will make itself felt. If we can attack the theoretical and experimental problem of alteration of the process of diffusion from status characteristics, we may be able to generate some general rules for designing retraining experiences and procedures.

Relevant Research and Theory

Prior to the first study of interracial interaction disability carried out on this research project, several studies had documented peculiarities of Negro behavior when faced with a white frame of reference. Katz and his associates had demonstrated the inhibition and

unrealistic estimate of their own performance in college Negroes (Katz & Benjamin, 1960; Katz, Goldston & Benjamin, 1958). Preston and Bayton (1941) showed lower scoring expectations by Negroes when told that their scores were being compared with whites than when being compared with Negroes. Hatton's study of bargaining behavior provided further evidence of the behavioral differences of the Negro-Negro situation versus the Negro-white situation (Hatton, 1965).

In the first study of interracial interaction disability, nineteen 4-man groups of junior high school boys played a game of strategy which required that the group make decisions as to which path on a game board they should take. The groups of boys were systematically observed, using a four-category observation scheme. A measure of which boy had influence over each decision of the group was also taken. Two of the boys were black and two were white, but they were matched on socio-economic background and attitude toward school.

In this situation it was predicted that the status characteristic of race would diffuse into the new task. In arriving at this prediction and at the specific nature of the experimental task, a strong usage was made of the following ideas from status characteristic theory: Race was seen as an instance of a diffuse status characteristic since (1) there are difference states of the status characteristic (black and white); and associated with these states is a system of beliefs involving valued and disvalued characteristics (for example, the black is associated with many disvalued characteristics such as laziness and rowdiness)

(Johnson, 1944). (2) A state of diffuse status characteristic also involves expectations or beliefs about how well actors of a given state will perform in a wide range of situations. Associated with the black race is the general expectation in our society that he will do less well in a wide variety of valued tasks. The first study assumed that this general expectation would be operative during the game task.

The theory explains that a power and prestige order will emerge on the new task which matches the values of the diffuse status characteristic when certain scope conditions for the task are met. The task must have differing outcomes, differentially evaluated. It must also require the actors to take into account each other's behavior and be sufficiently ego-involving so that participants are committed to a successful completion. There must also be some element of competence involved in the task which is perceived as instrumental for a successful outcome. There must be no other basis for discriminating between the participants other than this diffuse status characteristic. Lastly, the competence involved must not have been previously associated with or disassociated from the diffuse status characteristic (Berger, Cohen, Conner, & Zelditch, 1966, p. 47).

The hypotheses of this first study were confirmed; the status ordering of the outer society was repeated, to a significant extent, in the game task. Whites were much more likely to rank first and second in the number of acts initiated, and blacks were much more likely to rank third and fourth. On the independent measure of influence over the decisions made by the team, whites were more likely to attempt influence and to be

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successful in their influence attempts than were blacks. The confirmation of predictions derived from the theory indicated that interaction on the game was an excellent instance of the diffusion of race as a status characteristic as described by status characteristic theory.

Design of the Manipulation

The basic idea of the first attempt at changing expectations on competence at the game was to insert a new task, meeting the theory's scope conditions, but deliberately causing the competence of the black subjects to be superior to the competence of the white subjects. If both blacks and whites experienced the reverse of their general expectations on a new performance characteristic, they might then transfer these altered expectations to the game task, where we could see evidence of interaction of an "equal status" variety.

The only previous evidence available of successful intervention in the interaction between the races in the laboratory was the manipulation called Assertion Training of Katz and Cohen (1962). Biracial dyads, composed of Negro and white Northern college students, engaged in cooperative problem solving under two experimental conditions. Under one condition called Assertion Training, the Negro and white partner were given grossly different amounts of information so that the Negro had a much easier version of the problem 50% of the time. The partners were required to come to a team decision which was followed by announcement if the correct solution. Under the other experimental condition,

called the "No Training Condition," the difference in the amount of information given to the two partners was not so great as to force one of them to propose the correct solution with a high degree of confidence. The partners in all conditions were matched in ability on this type of problem as a result of a pre-test session. Under Assertion Training conditions, the Negroes and whites showed equal influence in determination of the team answer. Under the No Training Condition, the Negroes showed less confidence than did the whites in their answers and had less influence on the team decisions than did the whites. Thus we see that the No Training Condition shows the influence of interracial interaction disability, while Assertion Training produces a more equal-status interaction situation.

Having artificially removed the interaction disability, Katz then examines the transfer effect on the Negro subjects of a successful experience in taking the initiative vis-a-vis whites. Before and after the problem-solving task the subjects were required to guess the number of objects in some briefly presented visual stimuli. The procedure requires each partner to make a guess, show his guess to his partner, make a second guess and then to come to a team guess after which the Experimenter states the correct answer. The relative amount of influence of each partner was defined in terms of the similarity of the team decision to his first guess. The influence scores of Negroes who had experienced Assertion Training showed a significant increase from pre- to post-test compared to the influence scores of Negroes who were in the No Training condition.

This experiment provides some basis for the idea that the interaction disability can be experimentally manipulated and that manipulation may be followed by behavioral changes on a different type of task. One important and disturbing finding in this experiment was that the whites in Assertion Training downgraded the partner's ability and tended to reject him as a future co-worker.

Our experimental Expectation Training took a simpler form than Katz's study. We only manipulated competence, while Katz experimented with group versus individual regard in combination with Assertion Training. Performance on the game served as a "before" and "after" measure of the effect of Expectation Training. Participants played the game before and after treatment in the experimental groups and the control groups.

After the first round of the game, the blacks and whites in Expectation Training conditions see a different orientation film before the group builds a radio crystal set together. This new task of radio construction was designed to display greater competence on the part of those blacks who received special training. They have seen a film with clear diagrams and have had a chance to practice with actual radio parts. At no point does the film rely on a purely verbal presentation. The whites see a less helpful, more verbal film and have no opportunity to see or play with an actual radio set.

This treatment may be characterized as a relatively weak, safe treatment. The differential in competence produced by the training is not so startling or painful for white subjects so as to risk the negative

reaction observed by Katz. Subjects were uninhibited and happy about working in their corner of the crystal set. There were enough tools for all subjects, and everyone had some instruction for the task. Successful completion was guaranteed by having the host experimenter tactfully make corrections if necessary, taking the blame for the problem on himself. The effect of this training was then measured by scoring interaction on a second round of the game.

In the Control Condition, both blacks and whites see the less helpful film. In order to see if Expectation Training is more effective without the subjects having the opportunity to evaluate each other in a first task, a second Experimental Condition was run without a round of the game prior to Expectation Training. This condition is referred to as the Short Experimental Condition. All three conditions are diagrammed below.

Three Conditions of Expectation Training I

Condition	Pre-Test	Expectation Training	Post-Test
Long Experimental	One round of game	Blacks see better film than whites. Build radio set with whites.	One round of game
Short Experimental	No game	Blacks see better film than whites. Build radio set with whites.	One round of game
Control	One round of game	Blacks and whites see less helpful film. Build radio set together.	One round of game

Measures

The measures used were those developed in the first study. The most important is the initiation rate based on the number of acts attributed to a given actor falling in any of our four categories. The recipient of each act is also recorded. Also important is the measure of influence on the game, based on whose suggestion becomes the final group decision on which way to proceed on the game board.

Competence on the crystal set was measured by sampling the subject's degree of activity on the task at intervals. Also, a post-experimental interview was conducted with each subject including questions requiring the subject to rate other members of his group on helpfulness on the crystal set as well as on the game.

Hypotheses

The theoretical idea behind the treatment is that if blacks behave in a more competent fashion on a highly involving task, expectations for behavior on the game might be changed so that blacks would expect to be more competent on the game and the whites, having seen the black subject behave in a highly competent fashion, would be more likely to expect competent behavior on the round of the game following the training. If expectations are changed, then the theory gives us good grounds for predicting that behavior on the game should be changed. The specific hypotheses were as follows:

1. Blacks who receive Expectation Training in the Long Experimental condition will be more likely to show a favorable increase in influence and initiation rates from pre- to post-rounds of the game than blacks in the Control condition.
2. Comparison between all conditions of the round of the game following treatment should show a higher initiation rate and influence rate for blacks in either of the two Experimental conditions than in the Control condition.
3. The Short Experimental Condition should show the highest rate of initiation and influence for blacks in the round following the game because the group had no chance to form expectations for the game based on race before they were given Expectation Training.

A most important feature of this first training experiment is the lack of any attempt to train blacks who are very quiet on the game to persist in their arguments or to generate more suggestions. It is assumed that if the blacks expected to succeed at the game, they would turn out to be quite capable of becoming more voluble and stubborn about pushing their ideas. Status characteristic theory gives some support for the assumption that the effects of the process result in what <u>appears</u> to be incompetence, but <u>not</u> what one should assume is <u>actual incompetence</u>. Take away the effects of the diffuse status characteristic, and one should

theoretically see a parallel distribution of competence at this particular task for boys of similar socioeconomic background from the two races. Keep in mind that success at this task is a function of sheer persistence at arguing for a given path rather than the intellectual elegance of the suggestion itself. The first study showed that simple initiation rate was an excellent predictor of influence.

Another theoretical feature of this experiment is the lack of any attempt to make the performance on the crystal set relevant to the performance on the game. It is assumed that a success experience will translate into an increased expectancy for competence on a different task. The theory does not give us assurance on the generalization of an expectation for competence between different tasks. Even for the generalization of the diffuse status characteristic process from task to task, the only available idea is the degree of perceived similarity of elements in the tasks. This idea is referred to as the Spread of Relevance Assumption in a recent theoretical paper, "Distributive Justice: A Status Value Formulation," by Berger, Zelditch, Anderson, and Cohen. This experiment hopefully deals with transfer of reversal of expectations stemming from a diffuse status characteristic rather than the problem of transfer of expectations directly attributable to the status characteristic. There is only the empirical evidence from Katz's Assertion Training to indicate that transfer can take place between different tasks.

CHAPTER II

PROCEDURE

Selection of Subjects

The overall purpose of this study was to change a status ordering that emerged on a verbal task. The emerging status ordering is seen as a function of a diffuse status characteristic. In this case the race of the participants was the diffuse status characteristic.

In order for a status characteristic to be activated, five conditions must be met.

1. Members perform the task, T, which is valued and collective and in which some outcomes are viewed as successes and others as failures.

2. A characteristic, C, is instrumental to T with one state of C viewed as instrumental to success and positively evaluated and another state of C viewed as instrumental to failure and negatively evaluated.

3. No one has previously assigned states of C to himself or others.

4. Some members of the group possess one state of the diffuse status characteristic and other members possess another state.

5. The diffuse status characteristic is the only social basis for discriminating among the different members.

In this study, all groups consisted of four boys, two white and two black. The initial selection of participants was designed to meet the fifth scope condition. Race was the only social basis for discriminating one pair from the other. Questionnaires were distributed in public

schools and in neighborhoods with predominantly lower middle class populations. The students to be selected attended the seventh or eighth grades. The questionnaire sought information in four areas.

A. Experience building a radio crystal set: a series of items that are often built by boys were listed and included the item, "radio crystal set." Any student who had previously built a radio crystal set was excluded from the sample.

B. Level of Aspiration: based on responses relative to a child's aspiration toward higher education, he was classified as either high, medium, or low level of aspiration.

C. Attitude toward school: based on responses to questions concerning a child's feelings about attending school and doing well, he was classified as either low, medium, or high attitude toward school.

D. Parental background: questions were directed at the educational and occupational background of the parents. Based on their responses a child was placed in low, medium, or high S.E.S. classification.

All of the scores from B, C, and D were put together and students were selected from the medium range in level of aspiration, attitude toward school and parental background. The question regarding previous experience with a radio crystal set was designed to avoid previously assigned states of competence in the task. The questions on the child's level of aspiration, attitude toward school and parental background were designed to hold constant status characteristics other than race. To further insure that no one would have specific prior expectations for anyone else, students came from different schools and different neighborhoods. In each group they were within four inches of height of one another. (See Appendix: Recruitment Questionnaire and Scoring of Recruitment Questionnaire.)

Experimental Procedure

The subjects, two blacks and two whites, were driven to Stanford University each Saturday morning for a period of five months. The host experimenter was white and his interaction was stylized and controlled. Other visible staff members were of both races. The subjects each chose a number which randomly assigned them to a seating position. (See Appendix: Host Experimenter Script.)

The experimental room was small. It consisted of a table, four chairs, a chalk board and a small TV camera. The host experimenter explained the purpose of the TV camera and then presented the group with a game board of strategy that they would play for the first time. (See Appendix: Diagram of Room.)

The initial task was designed to establish a baseline for comparison of the effects of Expectation Training. The rules for the game were explained to each group by means of a tape recorder with the host experimenter repeating the key rules. (See Appendix: Host Experimenter Script.)

The task meets the scope conditions as set forth by the theory in statements 1 and 2. The game of strategy, called "Kill the Bull," is a cooperative task. The four students, as a team, must decide which of several paths to follow as a means of winning as many points as possible while moving from a position of "start" to a position of "goal." Each space on the board has either a positive or negative value and these values range from 0 to 2,000 points. The group may choose any path, but

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it only has fourteen turns in order to reach the goal. The number of spaces moved is determined by a throw of one die, which is done by the host experimenter after all discussion ends and the group decides on a final course.

In general, the task has three important features. First, the task is collective, requiring fourteen separate group decisions. Second, the task generates considerable discussion and interest among the participants, i.e., it is valued. Third, the task is ambiguous. Rationally, there is no best path to be found by anyone, except a sophisticated statistician. The ambiguity of the task is important because it allows for several alternative suggestions. It is during the alternative resolving process that a power and prestige order emerges.

Expectation Training Procedure

As in the seating selection for the first game, the host experimenter again allows each participant to choose a number, one through four, and records the number chosen by each person. The host experimenter explains that due to a lack of space the group must be split in half to receive the instructions for building the radio set. The host experimenter then picks a pair of numbers, seemingly at random, but each time the black students go to one room and the whites to another. In this manner the whites and the blacks receive differential instruction in the Long and Short Experimental Conditions.

Expectation Training Videotape

In both experimental conditions the blacks see an Expectation Training Tape designed to teach the building of the radio crystal set as effectively as possible. Each subject is provided with a set and the parts to practice on as he watches the film. The film makes use of clear diagrams and allows the subject to handle and try out the relevant part as the voice instructs. All instructions allow the subject to rehearse the relevant behavior. He is also given ample opportunity to see what a correctly completed set looks like.

White subjects in all conditions and black subjects in the Control Condition see a different tape, lasting about 10 minutes, the same length as the Expectation Training film. The film discusses the history of radios and introduces the student to a vocabulary of radio jargon which may be interesting but is not directly helpful in building the radio crystal set. Subjects seeing this tape receive no practical information to help them build the set.

Building the Crystal Set

The intent of the Expectation Training is to supply the black students with the skill and knowledge superior to the whites so that the black performance in building the radio will be visibly superior to the white performance.

Before the entire group begins to build the radio crystal set, another change in seating arrangements is done by the same random method

as reported earlier. The host experimenter hands out four copies of diagrams and simple instructions and says that some fellows find these directions helpful, whereas others find they don't need the instructions at all. (See Appendix: Host Experimenter Script.)

Most groups build the radio within six to twenty minutes. At the conclusion of their work, the group members are able to hear one radio station. At this point the entire group is given a five minute break. The host experimenter does not permit talking, but the group members enjoy a coke and candy bar and have some chance to walk around.

Post-Test Situation

The host experimenter changes the seating arrangement for a third time. He encourages the group to try and beat the total number of points they achieved during the first game. The group now plays "Kill the Bull" for the second time in order to test whether the emerging status ordering will be any different from game 1 to game 2.

At the end of the game, the host experimenter thanks the group for their cooperation and participation. At this point the staff observers enter the experimental room and are assigned one participant each. In separate rooms, each subject is asked a series of questions and evaluations about their experience during the study. The information on these questionnaires constitutes the post meeting questionnaire. Questions are asked about the clarity of the radio crystal set instructions, the degree of helpfulness of each boy during the building of the radio set and the

playing of the second game and any negative or positive feelings toward the entire study. (See Appendix: Post Meeting Questionnaire.)

Summary of Conditions

There were three conditions in this experiment. The Control Condition consisted of playing the game, all subjects viewing the same film about crystal sets, building the crystal set, and playing the game a second time. There were two experimental conditions. The Long Experimental Condition involved the same activity as in the Control Condition except that black subjects viewed a different film than white subjects and received more instruction on building the crystal set than did their white partners. In the Short Experimental Condition the game was played only once, after the building of the crystal set. As in the Long Experimental Condition, black subjects received more instruction in building the set and watched a more helpful film than their white partners.

Data Collection Procedure

A video picture of the experimental room is constantly transmitted with sound to another room where staff and observers can view the entire proceedings of each group. Video tape recordings are made of both games of "Kill the Bull." Staff and observers can review the interaction between group members by rerunning tapes; much of the scoring was done from these video tapes. Each game is scored by two independent observers using a modified Bales scoring system. (See Appendix: Scoring Instructions.)

The raw data obtained from trained observers is then recorded by the staff on matrices. (See Appendix: Sample Matrix.)

Each game is also scored for influence by two independent observers while the study is progressing. This measure was designed by Mark Lohman, a staff member. The Influence Measure is designed to score group members for the number of unique suggestions each makes in the game and the number of times these suggestions actually become the path followed by the rest of the group.

During the building of the crystal set a competency measure is taken by two members of the staff. This measure attempts to determine the relative activity of each member of the group in building the radio set. Every twenty seconds, observers record the numbers of the participants who have their hands on the crystal set. The scoring is carried on for ten seconds. At the completion of the crystal set, a total activity score is computed for each member of the group.

CHAPTER III

RELIABILITY OF THE SCORING SYSTEM

The Observers

A group of three observers, two black and one white, were selected and trained at the beginning of the data collection. Due to scheduling difficulties, this group proved unable to complete the scoring and an addition was made of two white observers who were trained together at a later time by a different instructor. All observers were trained to the criterion of inter-observer reliability described below.

The Reliability Criterion

Subjects' verbal responses were recorded in four categories (Type of Act): performance outputs, action opportunities, positive evaluations, and negative evaluations. In addition to this categorization, the scoring system requires designation of the person making the response (Initiation) and the person to whom the response was directed (Receipt).

Each group was scored by two observers.[1] A chi-square test of significance was computed to determine whether the disagreement in the observers' scoring of Initiation, Type Act or Receipt produced a statistically significant difference. (A non-significant difference between

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[1]For three groups, damage to video tape prevented observation by a second observer.

observers thus indicated a relatively reliable result.) If p reached a significance level of .20 or less on Initiation or Receipt, a third observer scored the group. His data was then tested for reliability with that of the other two observers, and the data of the two observers achieving the highest level of reliability (chi-square test) on Initiation and Receipt was selected for use. Table 1 shows, for thirty-seven groups, the number of groups where the value of p reached a significance level of .20 or less.

TABLE 1

Outcome of Significance Tests for Reliability for Three Dimensions of Interaction on 37 Groups[2]

	Non-Significant Chi-Square	Significant Chi-Square
Initiation	36	1
Type Act	15	22
Receipt	31	6

The level of reliability on Initiation was excellent, both according to the statistical test and by careful comparison by eye. The high reliability of Receipt ratings is particularly notable in light of the history of difficulty with this dimension in small group observation. The reliability of Type Act reflects the difficulty we experienced in constructing

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[2]As previously noted, three of the 40 groups for which data are reported were observed by only one observer.

clear definitions of the four categories. At the time the two additional observers were trained, this difficulty had been somewhat resolved; of the nine groups scored by both of these observers, eight had a high degree of reliability on Type Act.

Observer Bias Checks and Reliability of Rank Order

The results reported for this experiment are based on the average of the data for the two selected observers for each group. Portions of the analysis are based on the rank ordering of subjects in a group according to this average. A careful check of the raw data revealed that it was possible for the observers to disagree on the rank order of subjects on a dimension in a group where the reliability was excellent by the criterion in Table 1. For example, looking at the raw scores for Group 8, on Initiation for Game 1, one sees the following information:

Initiation Scores on Game 1 for Group 8

Observer	Subject A	Subject B	Subject C	Subject D
01	22	21	18	1
02	17	19	16	4
Average of both observers	19.5	20	17	2.5

The observers disagree on which subject would be first (highest) ranked and which should be second. The use of the average of the observers to determine the rank ordering of the subjects by their initiation rate would present a misleading picture if, in the instances of observer disagreement over at least one subject of each race, one race more often came out with

the higher ranking in the average. As can be seen in Table 2, advantage accrued to neither race through the use of the average.

TABLE 2

Affect of Averaging Observers When They Disagree on Rank

	Initiation		Receipt	
	Advantage of Average*		Advantage of Average*	
	Black	White	Black	White
Control	5	4	5	1
Long Experimental	6	8	6	10
Short Experimental	3	5	6	10

*Advantage of average is based on Observer disagreement on at least one subject of each race in a single game. A score of 1 is tallied for the race retaining the higher of the disputed ranks when the average of the two observers is taken.

By the chi-square criterion we had a satisfactory level of inter-observer reliability. We made two further investigations for subtle observer bias. The first question asked was the following: Do ranking disagreements occur primarily over black-white pairs? This may indicate that disagreement results from differing perceptions of black and/or white behavior. All observer disagreements were classified according to the race of the subjects over whom there was disagreement, and a tally was then made of the number of ranking disagreements occurring with each of the possible racial combinations of subjects. These tallies appear in Table 3 in the form of percentage of all disagreements. Because there are twice as many black-white pairs (4) as there are within race pairs (2), we

would expect a chance distribution of disagreements to show roughly twice the percentage of disagreements in the Black-White category as we find in the Black-Black and White-White categories taken together. We would also expect a chance distribution to show roughly the same number of disagreements in the Black-Black-White category as in the White-White-Black category. The results presented in Table 3 closely approximate these predictions on the basis of chance. We concluded that observer disagreement cannot be predicted by race of subjects observed.

TABLE 3

Observer Disagreements by Race of Observed Subjects: Initiation and Receipt*

Race of Observed Subjects	Initiation	Receipt
Black-White	21%	28%
White-White	7%	8%
Black-Black	7%	4%
Black-Black-White	4%	4%
White-White-Black	4%	7%
All Subjects[3]	4%	4%

*Percentage figures represent percentage of total number of observer disagreements of rank ordering for one game (76) falling into each category of possible racial composition.

[3]Disagreement on the ranking of all subjects in a single group occurred when the performances of all subjects were very nearly equal, and their raw scores therefore differing by only one or two acts.

The second question was a more specific attempt to test for individual observer bias: Did the ranking disagreements (including observations which did not satisfy the chi-square criterion) reveal a tendency for one observer to consistently score one race of subjects higher or lower than other observers? As can be seen in Table 4, no evidence was found to indicate a racial bias in the data of individual observers.[4]

TABLE 4

Pattern of Observer Disagreement on Ranking When Subjects of Both Races are Involved: For Initiation and Receipt*

	Initiation	
Observer	Black Ranked Higher	White Ranked Higher
01	9	7
02	3	2
03	6	9
04	1	0
05	1	0

	Receipt	
Observer	Black Ranked Higher	White Ranked Higher
01	7	10
02	6	3
03	9	11
04	3	3
05	2	4

*The unit of scoring is based on two units per one disagreement between two observers: each observer receives a tally or one unit for the race of the subject he places in the higher of the disputed ranks.

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[4]The related problem of possible systematic differences by race of observer was carefully examined in Technical Report #1. No such systematic difference was discovered.

CHAPTER IV

THE LACK OF MAIN EFFECTS

The simplest way to examine the data for the effects of our manipulation is to count the number of groups where blacks and whites held various ranks (Table 1). In the Long Experimental Condition there should be a shift in the probability of holding certain ranks between Games 1 and 2, with blacks becoming more likely to hold the top two ranks and less likely to hold the bottom two ranks. The Long Experimental Condition, designed to produce competent black behavior on the crystal set, can be compared to the Control Condition where black and white subjects received the same instructions for the crystal set. Any increase in initiation for blacks between the two rounds of the game gives an idea of what to expect by allowing interaction to proceed between the participants without trying to change expectations. The Short Experimental Condition has only one game following the Expectation Training and the building of the crystal set. The single round of this condition can be compared to Game 2 of the other treatments to estimate the effects of omitting a pre-test game.

If equal status interaction occurs, then race of the subject should be unrelated to rank; the probability of a black or a white person holding any rank should be .50 over a sufficiently large number of groups. Table 1 gives the proportion of groups run in each condition where the subject in a given rank is black.

TABLE 1

NUMBER AND PERCENTAGE OF GROUPS WITH A BLACK SUBJECT IN EACH OF FOUR RANKINGS: BY GAME AND CONDITION

Condition	Rank	Groups Where S With This Rank Is Black			
		Game 1		Game 2	
		No. Groups	%	No. Groups	%
Long Experimental (N = 13 groups)	High Rank	5	.38	4	.31
	2nd Rank	3	.23	7	.54
	3rd Rank	8	.62	5	.38
	4th Rank	10	.77	10	.77
Control (N = 10 groups)	High Rank	5	.50	4	.40
	2nd Rank	2	.20	3	.30
	3rd Rank	5	.50	4	.40
	4th Rank	8	.80	9	.90
Short Experimental (N = 17 groups)	High Rank			6	.35
	2nd Rank			8	.47
	3rd Rank			6	.35
	4th Rank			14	.82

Contrary to predictions, race is highly related to rank in every round of the game for every condition except in the first game of the Control Condition for first and third ranks. The two experimental conditions were more likely to show consistent relationships between being white and being more active than was the Control Condition. In every comparison made between races within the two experimental conditions, the blacks were less likely than the whites to hold top ranks; blacks were far more likely to hold bottom rank than were whites. An examination for improvement

between Games 1 and 2 in the Long Experimental Conditions (as a result of Expectation Training) shows that (1) the proportion of groups with a black holding the top rank has fallen rather than increased, and (2) the proportion of groups with a black holding bottom rank remains unchanged at the level of 77%. In order to see if the omission of the pre-test in the Short Experimental Condition improved the effectiveness of the Expectation Trained, the probability of having a black in the top rank in this treatment was compared to the same probability in Game 2 of the Long Experimental Condition. In the Short Experimental Condition, 35% of all groups had a black in the top rank as compared to 31% of all groups in Game 2, Long Experimental Condition--a trivial difference. Furthermore, both of these treatments had a lower probability of a black in the top rank than Game 2 of the Control Condition where 40% of the groups had a black in the top rank.

There were only ten groups run in the Control Condition; and they turned out to be most unusual in terms of our earlier study and in comparison to Expectation Training groups. Obviously, the theoretical predictions were that blacks would be much more likely to hold bottom ranks than whites, and much less likely to occupy top ranks. Game 1 of the Control Condition violated these expectations although Game 2 was more familiar in its pattern of relative activity for whites and blacks. The anomaly lay in the high proportion of groups in Game 1 on the Control Conditions with a top-ranking black--five out of the ten groups run. The familiar pattern of having at least one very inactive black was still characteristic of

these Control Condition groups. This was a very challenging control against which to show favorable change as a consequence of Expectation Training.

Some blacks appear to shift from third to second rank between Games 1 and 2. In the Long Experimental Condition, the probability of a black being in second rank shifts from .23 to .54 from Game 1 to Game 2; the corresponding probability of being in third rank drops from .62 to .38. The pattern of probabilities of blacks being more likely to hold second rank than third rank in Game 2 of the Long Experimental Condition is unusual in terms of our experience. It is not characteristic of the Control Condition, but it does repeat in the Short Experimental Condition with the probability of a black holding second rank as .47 and the probability of a black holding third rank as .35.

Table 1 percentages are based on the number of groups in a given condition where blacks held a specific rank. The percentages in Table 2 are based on all black subjects run in each treatment; a percentage distribution is calculated for these subjects over the four possible ranks. If race had nothing to do with activity, the probability of blacks holding each of four ranks should be approximately .25. When observed proportions are compared to the probabilities expected under this assumption of "no relationship" between activity and race, a pattern similar to that in Table 1 emerges. Blacks have a lower than .25 probability of holding first rank in all cases except Game 1 of the Control Condition. Blacks have a higher than .25 probability of holding bottom rank in every game in every condition. In the Long Experimental Condition, the favorable

shift in probability of blacks appearing in second rank appears between Games 1 and 2; only 11.5% of the blacks in Game 1 hold second rank while 27% of the blacks in Game 2 hold this rank. Also in the Short Experimental Condition the probability of a black holding second rank moves to the chance level, i.e., 23%.

TABLE 2

PERCENTAGE OF BLACKS IN EACH CONDITION WHO HELD A GIVEN RANK ON INITIATION: BY GAME AND CONDITION

Rank	Expected Probability: Chance Model	Long Experimental		Control		Short Experimental
		Game 1	Game 2	Game 1	Game 2	
1	.25	.19	.15	.25	.20	.18
2	.25	.12	.27	.10	.15	.23
3	.25	.31	.19	.25	.20	.18
4	.25	.38	.38	.40	.45	.41
	1.00	1.00	1.00	1.00	1.00	1.00

The analysis presented in Table 3 uses the percentage of the group's total initiation contributed by any one individual. The use of this indicator was chosen because it avoids the total dependence on rank ordering where there is uncertainty about reliability (see Chapter 3). In this analysis, subjects are divided into three categories, based on the percentage of total initiation they contributed to the group in the first round of the game. "High" contributors were responsible for 31% or more of the total group initiation; "Medium" contributors gave 20-30% of the initiation; and "Low" contributors gave less than 19%. For each of these

three categories in the Long Experimental and the Control Conditions an average was struck of the difference in percentage of initiation contributed by individuals in the first and second games. If there is an effect of Expectation Training, there should be a bigger positive difference between the two rounds of the game in the Long Experimental than in the Control Condition.

TABLE 3

MEAN PERCENTAGE SHIFT BETWEEN GAMES 1 AND 2 FOR HIGH, MEDIUM AND LOW PERCENTAGE CONTRIBUTORS TO TOTAL GROUP INITIATION ON FIRST GAME: FOR BLACKS IN TWO CONDITIONS

Size of Contribution	N	Experimental	Control
High (over 31%)	5	- .04	- .05
Medium (20-30%)	11	+ .02	- .01
Low (Below 20%)	10	+ .03	+ .03

Examination of Table 3 shows that there is no difference in average percentage shift for "High" and "Low" Contributors between the Long Experimental and the Control Conditions. Both these groups show the characteristic regression toward the mean usually found in a pre- and post-test design.

For the medium category of initiation, there is a tendency for more favorable shift after treatment than in the Control Condition where the shift is, on the average, slightly negative. The difference is very small but bears out the previously described tendency for favorable shift after treatment for middle-ranking blacks.

Means are not a very sensitive statistic; clearer evidence on the pattern of response to treatment might emerge by looking at individual data. The use of percentage of total initiation in a group contributed by an individual controls for changes between the games in the total interaction rate. The analysis then uses the incidence of favorable shifts in percentage of initiation between the games for individuals. These shifts are graphically displayed in Figures 1 and 2. The bar graphs show the percentage shift between the two games; black subjects showed a range of change from 15% loss in contribution to total initiation to 15% gain in contribution. Black subjects are spread throughout this range with a slight tendency to cluster around both sides of the zero point. The distribution of percentage shifts for black subjects in the Control Condition is very similar to the distribution in the Long Experimental Condition. There is no evidence of effect of treatment here. No graph can be shown for the Short Experimental Condition because it only has one game.

The influence measure should also be examined for effects of Expectation Training. Although influence and initiation rate are related theoretically and empirically, they are by no means identical and are derived in different ways. The initiation rates are a total of all verbal acts compiled in one of the four observation categories. The influence measure is derived from observing who makes unique suggestions as to which way the group shall proceed on the game board. For each turn the man whose suggestion is adopted as the group decision is also recorded. Non-verbal suggestions are counted. The precise method of measurement is in Appendix I.

FIGURE 1

DISTRIBUTION OF CHANGE IN PERCENTAGE OF GROUP INITIATION SCORES FOR BLACK SUBJECTS BETWEEN GAMES IN CONTROL CONDITION

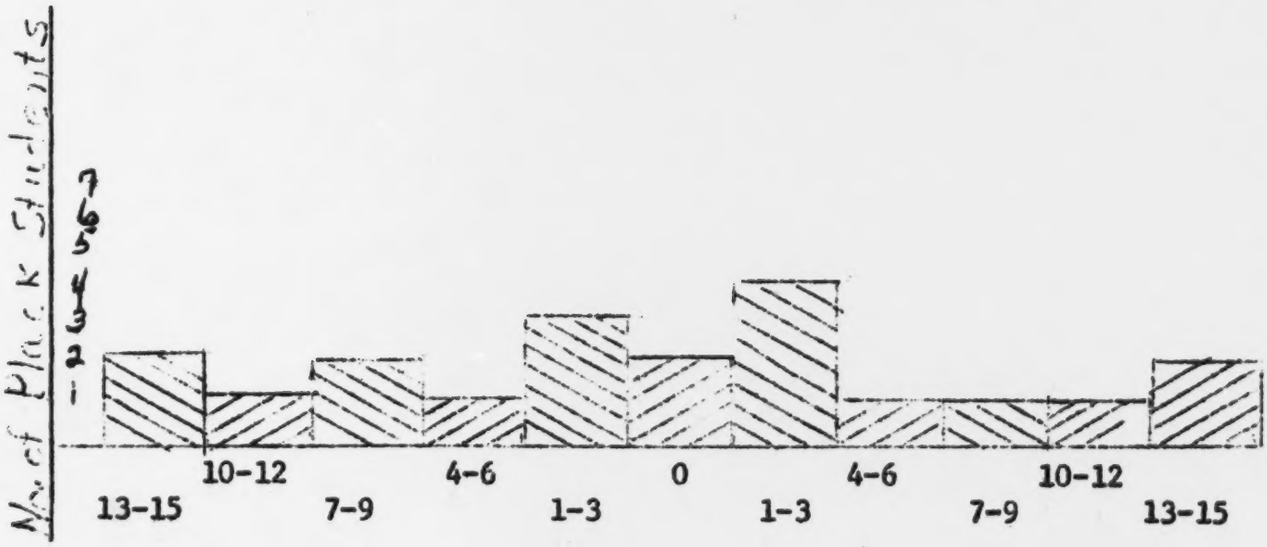


FIGURE 2

DISTRIBUTION OF CHANGE IN PERCENTAGE OF GROUP INITIATION SCORES FOR BLACK SUBJECTS BETWEEN GAMES IN LONG EXPERIMENTAL CONDITION

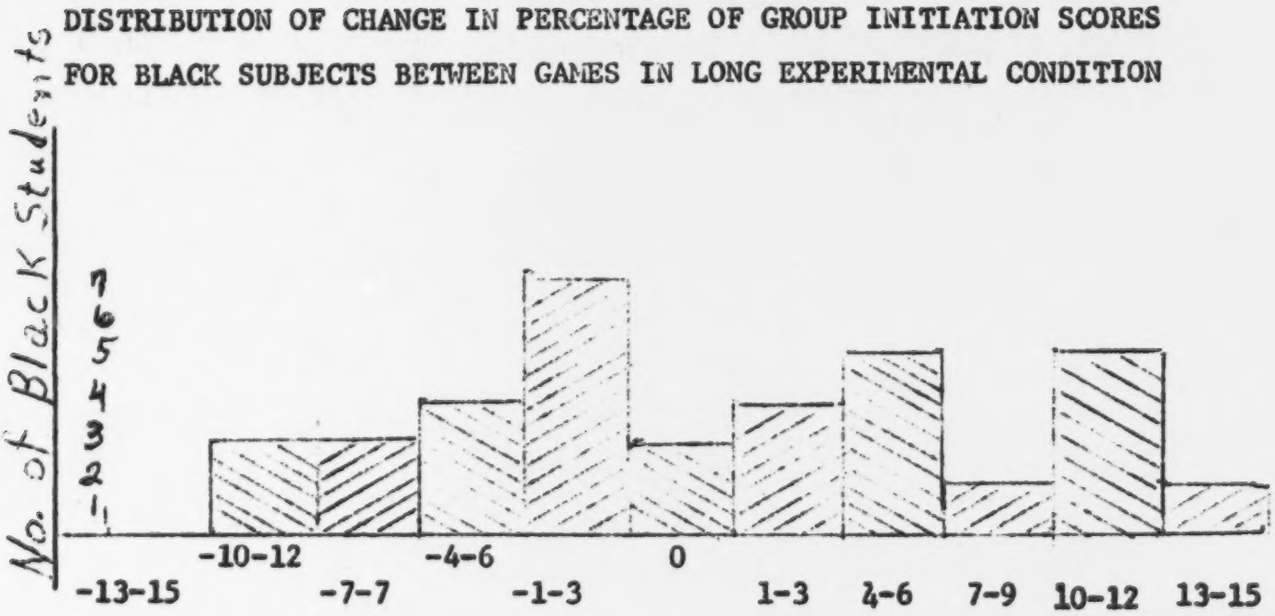


Table 4 presents the frequency of influence attempts in the form of unique suggestions for the four actors in each treatment. Table 5 gives the number of successful influence attempts as measured by the number of times an actor's path was followed as the group decision. In both these tables, the actors are ranked within racial pairs as to who is the more active in giving unique suggestions. Differences between races are then seen within two categories of "Relatively High Suggestion Rate" and "Relatively Low Suggestion Rate."

TABLE 4

FREQUENCY OF UNIQUE SUGGESTIONS FOR BLACK AND WHITE ACTORS RANKED BY SUGGESTION RATE: FOR THREE CONDITIONS AND FIVE GAMES

Rate of Unique Suggestion Made	Race	Conditions: Long Control Game 1	Long Control Game 2	Long Experimental Game 1	Long Experimental Game 2	Short Experimental Game 1
High Suggestion Rate	Black	98	75	131	121	147
	White	100	93	153	133	171
Low Suggestion Rate	Black	50	44	39	55	71
	White	63	52	81	78	91

TABLE 5

FREQUENCY OF PATHS FOLLOWED FOR BLACK AND WHITE ACTORS RANKED BY SUGGESTION RATE: FOR THREE CONDITIONS AND FIVE GAMES

Rate of Unique Suggestion Made	Race	Conditions: Long Control Game 1	Long Control Game 2	Long Experimental Game 1	Long Experimental Game 2	Short Experimental Game 1
High Suggestion Rate	Black	52	42	68	63	72
	White	49	46	87	74	98
Low Suggestion Rate	Black	21	17	10	21	17
	White	16	26	30	36	37

Whites make more unique suggestions and are more successful in influencing the group both before and after Expectation Training. This pattern of white influence holds within both categories of suggestion rate. Comparison of the less active white with the less active black shows a consistently sharper pattern of white dominance than comparison within the more active category.

Interpretation of Failure of Treatment

The interpretation of "no effect" is unmistakable. The indices are quite consistent in showing (1) no upward shift in initiation or influence rate for blacks following Expectation Training in the Long Experimental as compared to the Control Condition, and (2) no difference in black rates between the game following treatment in the Short Experimental Condition and the second games in other conditions where a round was played prior to treatment.

There are two possible interpretations: (A) The process of diffusion from a status characteristic cannot be altered by assigning "high competence" to the low status person on an important new task; or (B) Our particular procedure of assigning "high competence" on the crystal set task was not effective.

Examination of the measure of competence on the crystal set task and the perceptions the actors held of each other indicates that the manipulation was not powerful. The Expectation Training Film, it will be recalled, reduced abstract verbal explanations to simple diagrams and

allowed actual practice on radio sets. White subjects did not have the chance to practice on the radio set and did not see helpful diagrams in their film. Although blacks who saw the Expectation Training Tape were much more active on the crystal set than blacks who saw the other tape in the Control Condition, they were not always more active than the whites with whom they were working. The Competency Measure was the indicator of relative activity; at regular time intervals the task behavior of each of the four individuals was recorded (see Appendix G). There are 24 blacks who ranked third or fourth in their respective groups on the Competency Measure and 33 blacks who held the top two ranks (see Table 6).

TABLE 6

RANK ORDER ON CRYSTAL SET ACTIVITY IN ALL EXPERIMENTAL CONDITIONS USING COMPETENCY MEASURE: BY RACE

Race	Rank on Activity				
	1	1.5	2	3	4
Black	19	1	14	13	11
White	9	1	14	16	18

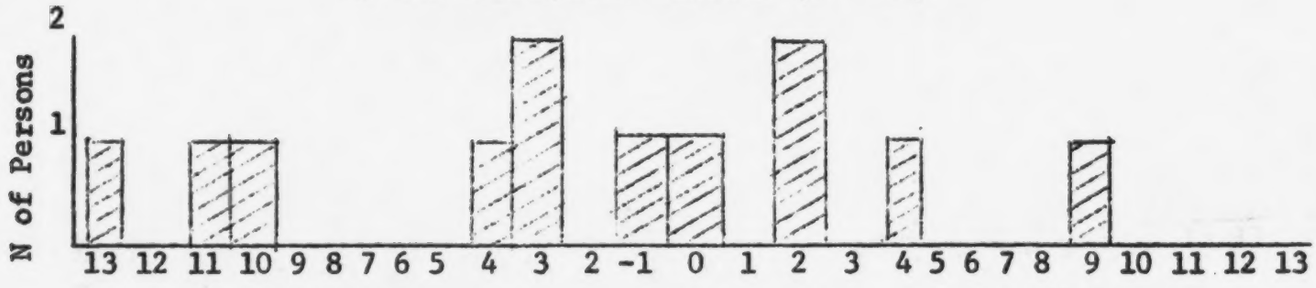
We had hoped to produce a training situation where the blacks would experience themselves as more competent than the whites, and the whites would experience themselves as less competent than the blacks. Looking at the results of this relatively crude measure of activity, it seems unlikely that we were successful if the experimentally-treated blacks were so frequently less active than their white partners.

Was the treatment effective for those individuals who were visibly more active than their white partners following Expectation

Training? Perhaps there might be an effect observable in the game situation for that subset of blacks where the training was effective. Taking those blacks who were higher than both whites in their group on the Competency Measure, Figure 3 displays the shifts in percentage contributed to group initiation between Games 1 and 2. There were 12 subjects who fit this description; only four showed a favorable percentage shift greater than zero. The distribution of shifts in this group is clearly no different than the Long Experimental Condition as a whole as shown in Figure 1.

FIGURE 3

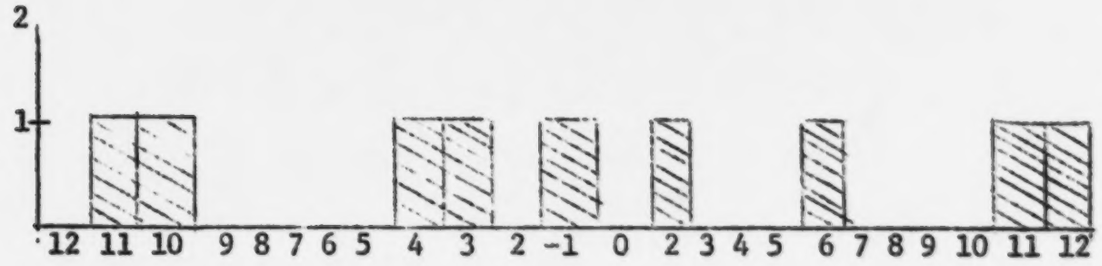
DISTRIBUTION OF CHANGE IN INITIATION RATES BETWEEN GAMES 1 & 2 FOR THOSE BLACKS HIGHER THAN BOTH WHITES ON THE COMPETENCY MEASURE (N = 12)



Because scores for a group on the Competency Measure often clustered closely together, we also selected black subjects who were higher than "4" above the Mean Competency Score for their group as a whole. Even with this stricter measure, Figure 4 illustrates that only 4 of the 9 subjects show a favorable shift greater than zero.

FIGURE 4

DISTRIBUTION OF CHANGE IN INITIATION RATES BETWEEN GAMES 1 & 2 FOR THOSE BLACKS HIGHER THAN 4 ABOVE THE MEAN ON THE COMPETENCY MEASURE (N = 9)



The failure of experimental effect on subjects who responded to treatment by showing greater activity on the crystal set task forces us to re-examine the manipulation task much more closely. Did it meet the scope conditions for the theory? (See Appendix [illegible].) Observers of the boys at work reported an extremely high level of interest and enjoyment of the task. They were involved and wished to make a contribution, according to their own, post-experimental report and to the report of observers. But was the nature of the task such as to force evaluation of each other's contributions? In the game, they had to take account of each other's contributions in order to reach agreement as directed. In the crystal set, each actor had a tool at his disposal, had been instructed what to do, and had sufficient elbow room to work at his corner of the radio. Watching the subjects at work, we began to believe that there was something of "parallel play" about the task. Actors were not watching each other but were absorbed in their corner of the task. Only if the set failed to work

was there any real critical evaluation, and by then, none seemed to know or care "who" had made the mistake.

The original theory of status characteristics does not deal directly with change of expectations based on diffuse status characteristics. In the experiments completed at Stanford where competence at specific performance characteristics has been manipulated, the experimenter clearly assigned a high and low value on these performance characteristics so that the subject could not miss understanding where he stood. Clearly, we are not going to be very successful in using competence on a performance characteristic to change expectations flowing from a diffuse status characteristic unless we are able to force both black and white actors to notice and evaluate their relative positions on competence. In conclusion, we often failed to produce differential performance in competence at the crystal set task and furthermore, even when there was a differential competence, it was not necessarily noticed and evaluated because the task failed to meet the scope condition requiring interdependence.

Because of these problems, the basic idea of changing expectations by means of assigning competence on a new performance characteristic has not been put to a good test. We are not able to reject the hypothesis that assigning low status subjects "high" competence on an important new task will alter the effect of the diffuse status characteristic on game performance. In the future, tests of the hypothesis must include a more thoroughly pre-tested manipulation task where we have good grounds for believing that the subjects are assigning themselves and others high and

low states of competence as intended. In addition, the nature of the manipulation task should force the actors to notice and evaluate each other so that both high and low status actors achieve the desired perceptions.

In the following chapter, some highly provocative findings are presented on the problem of persuading low status actors to notice highly competent behavior, even when outside observers can see it. These findings on perception only underline the importance of checking the manipulation task and each subject on how well he meets the conditions the experiment is trying to produce.

There is one final note to be added on the peculiarities of the Control Condition. There were only ten groups in this Condition. The unexpected incidence of blacks who must have had high expectations for competence on the game, points up the necessity of running more groups for controls to cover this variability. Possibly, running the experiment with subjects from a less militant community might help in this matter. Without the earlier descriptive study, the results of the control groups would have produced a serious problem of interpretation.

CHAPTER V

SUBJECTS' PERCEPTION OF COMPETENCE

Procedure

All subjects were rated for their performance on the crystal set and on the game by staff observers. The competency measure was the basis for rank ordering subjects on the crystal set. This measure scored primarily non-verbal activity in building the set. Every twenty seconds observers would record which subjects were participating in building the set for a period of ten seconds. When the crystal set was assembled, a total score of activity was computed for each subject. This score served as the basis for each subject's position in the rank order of his group. The initiation rate was the basis for rank ordering subjects on the second game. Subjects were then divided by race and by their rank order positions, 1, 2, 3, or 4 on the game and on the crystal set.

On the post-interview questionnaire, each subject was asked to rate the members in his group on the basis of "helpfulness" in building the crystal set and "helpfulness" in playing the game. In review, all subjects were rated by staff observers, using the competency measure and the observation of initiation; subjects were also rated by all black and all white subjects in the post-interview questionnaire. Tables 1 and 2 in the next section are based on the following raters and subjects being rated:

Raters	Rated
Staff Observers	Least Active Black
All Black subjects	Least Active White
All White subjects	Most Active Black
	Most Active White

Results

We examined the degree of agreement between the rank order based on the competency measure and the rating given by subjects to their group members and themselves on "helpfulness" in building the set. (See Graphs 1(a) and 1(b).) We also looked at the degree of agreement between the rank order position based on the initiation rate in the second game and the subject's rating of "helpfulness" of their group members and themselves in playing the second game. Tables 1 and 2 are based on the data from these analyses. For example, in Table 1, black raters rated the "least active" black subjects (rank 4 on Competency Measure) as least "helpful" in building the crystal set 51% of the time. In Table 2, white raters rated the "most active" whites (top initiator) as most "helpful" in playing the second game 35% of the time.

The following comparisons reveal the rating pattern of black raters:

1. Black rating of least active blacks and least active whites: Blacks perceive least active blacks as being least "helpful" more often than they perceive least active whites as being least "helpful" on both tasks.

TABLE 1

PROBABILITY OF LEAST ACTIVE SUBJECT (BY STAFF MEASURES) BEING RATED AS "LEAST HELPFUL" BY TWO RACES IN TWO TASKS*

	Rater	Least Active Black (N = 16)	Least Active White (N = 23)
Crystal Set	Black	51%	32%
	White	46%	52%
		(N = 32)	(N = 7)
Game 2	Black	44%	15%
	White	35%	46%

*This table was constructed from the data in Graphs 1g, 1h, 2g, and 2h.

TABLE 2

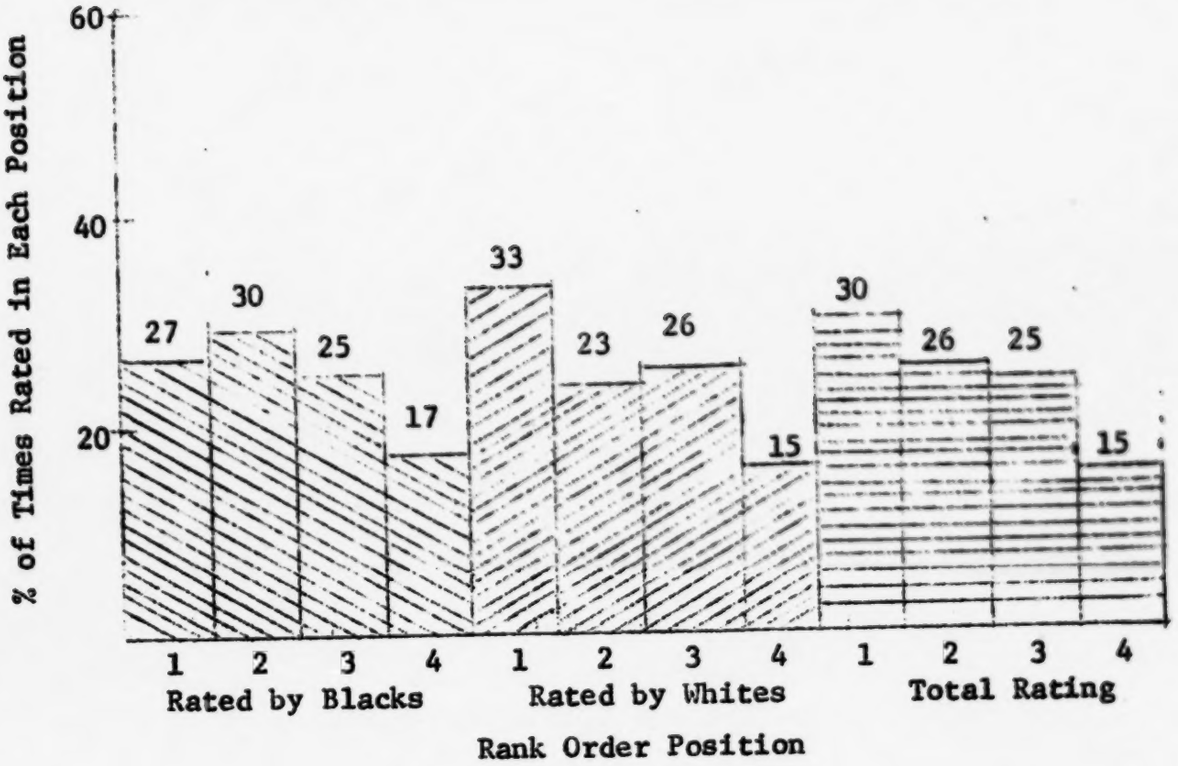
PROBABILITY OF MOST ACTIVE SUBJECT (BY STAFF MEASURES) BEING RATED AS "MOST HELPFUL" BY TWO RACES IN TWO RASKS*

	Rater	Most Active Black (N = 21)	Most Active White (N = 17)
Crystal Set	Black	27%	62%
	White	33%	37%
		(N = 14)	(N - 25)
Game 2	Black	37%	44%
	White	52%	35%

*This table was constructed from the data in Graphs 1a, 1b, 2a and 2b.

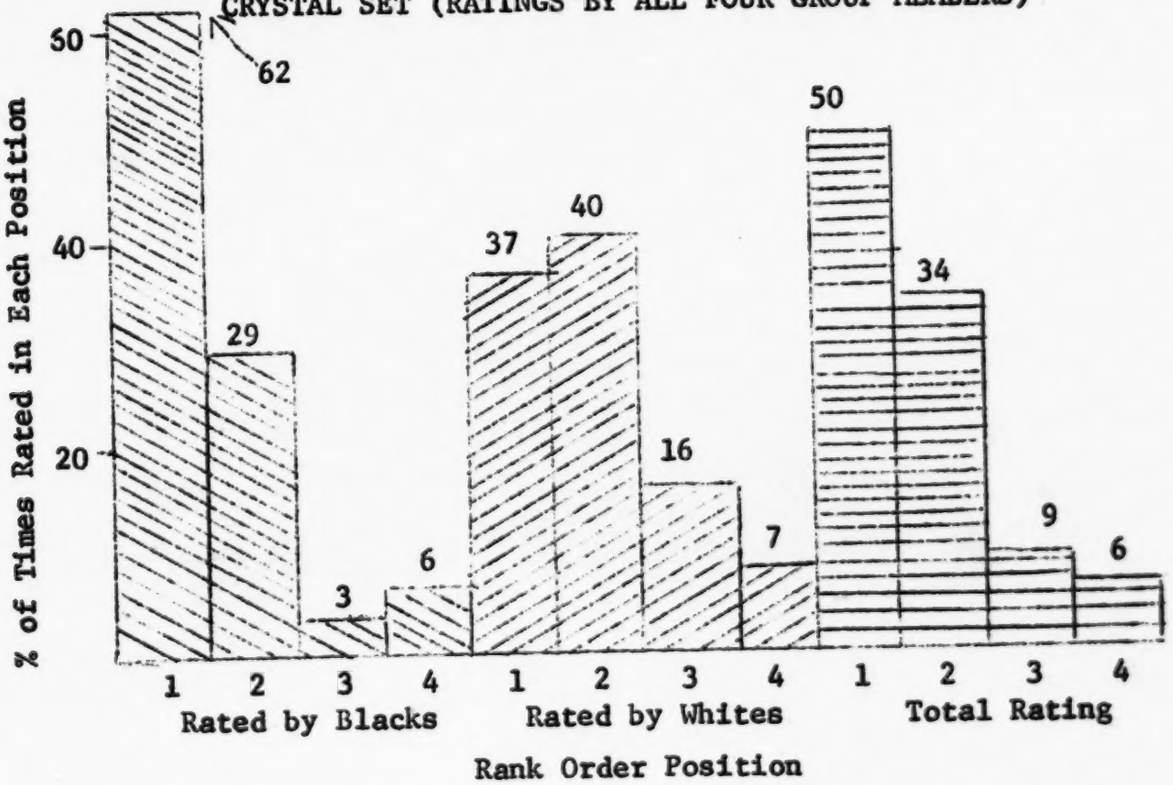
GRAPH 1(a)

BLACKS IN POSITION ONE OF RANK ORDER ON COMPETENCY MEASURE:
CRYSTAL SET (RATINGS BY ALL FOUR GROUP MEMBERS)



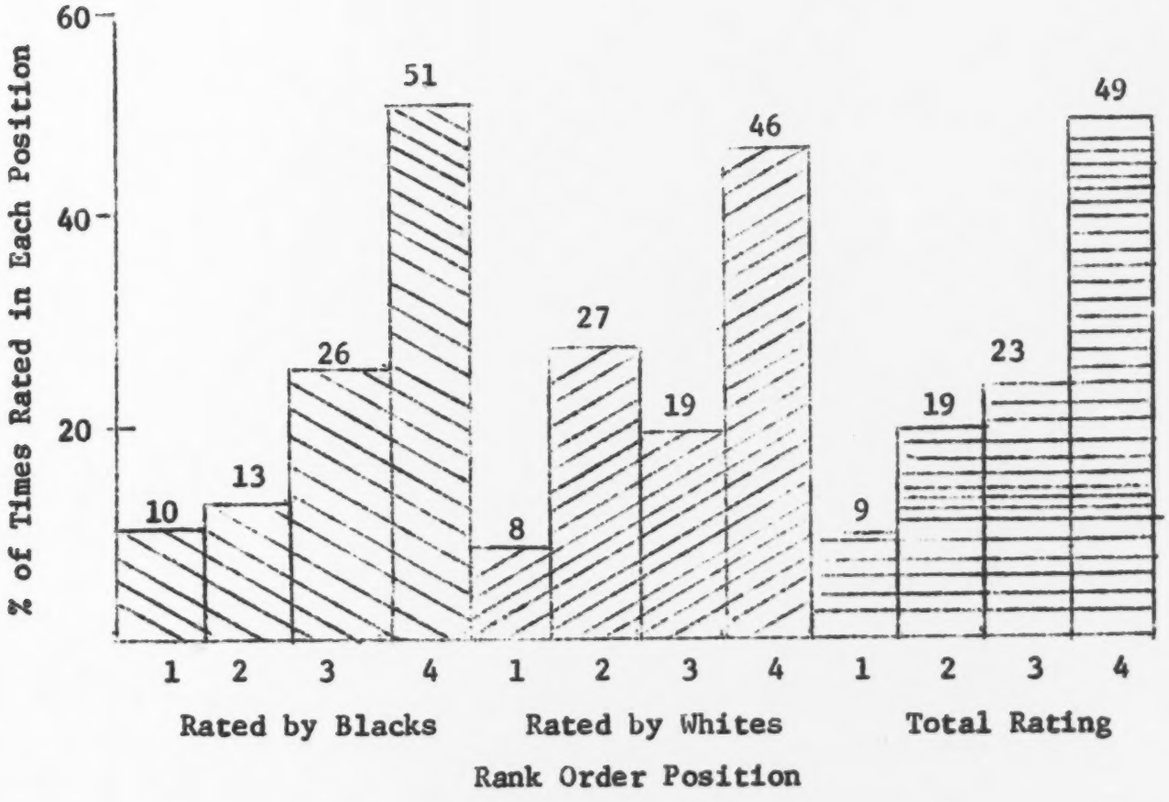
GRAPH 1(b)

WHITES IN POSITION ONE OF RANK ORDER ON COMPETENCY MEASURE:
CRYSTAL SET (RATINGS BY ALL FOUR GROUP MEMBERS)



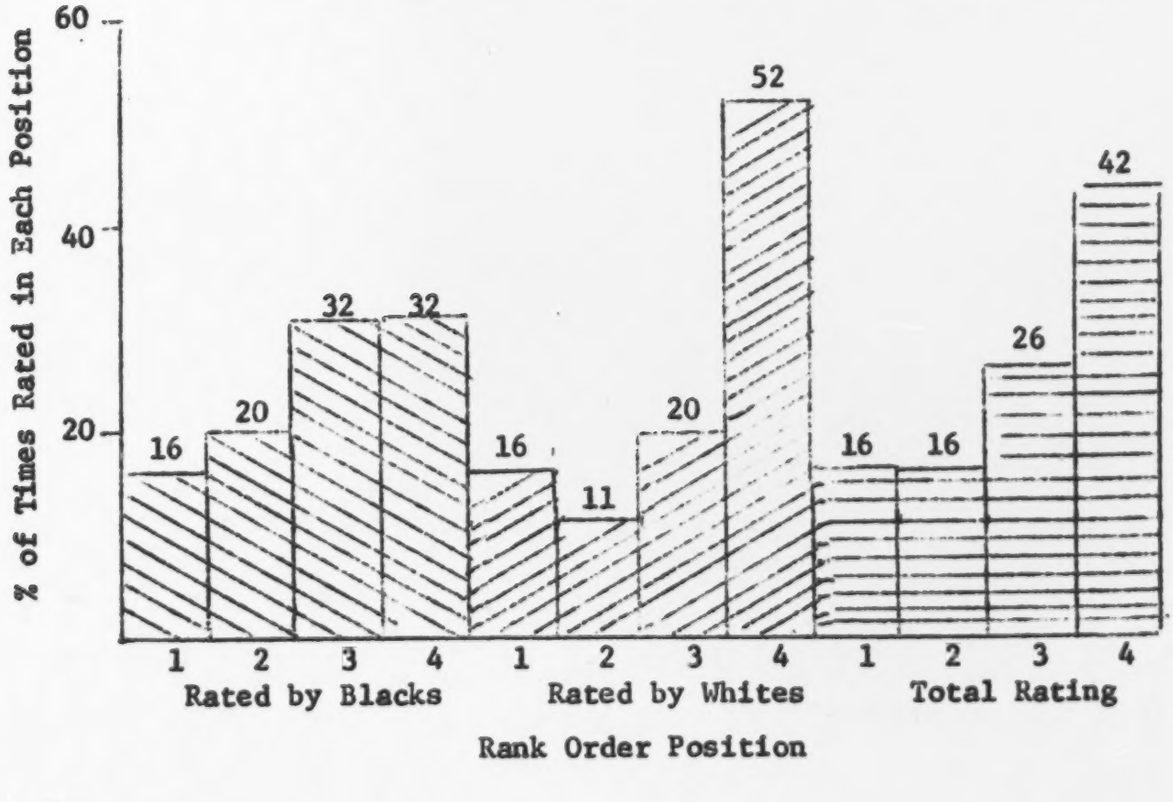
GRAPH 1(g)

BLACKS IN POSITION FOUR OF RANK ORDER ON COMPETENCY MEASURE: CRYSTAL SET (RATINGS BY ALL FOUR GROUP MEMBERS)



GRAPH 1(h)

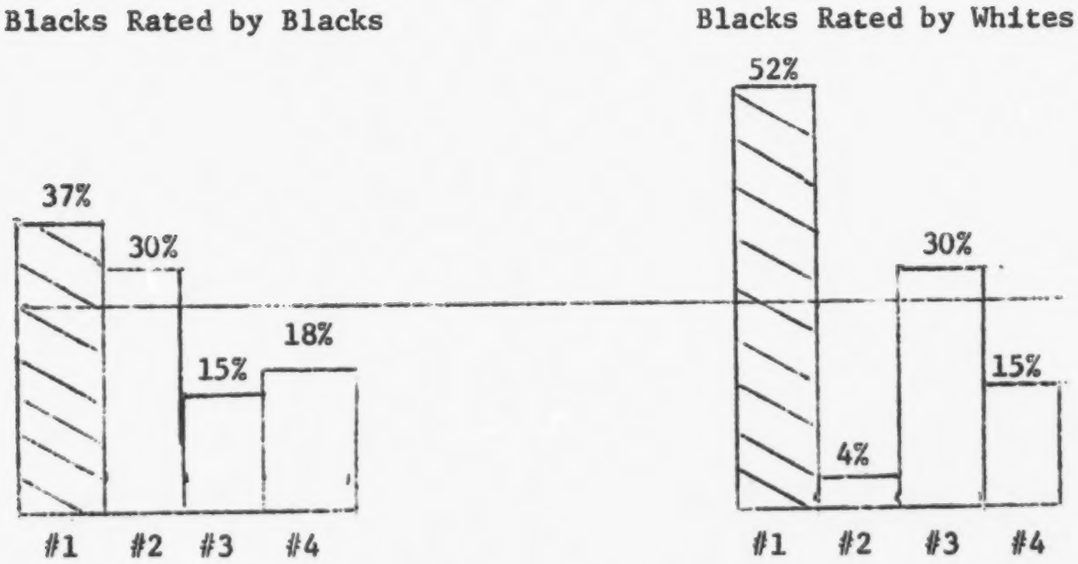
WHITES IN POSITION FOUR OF RANK ORDER ON COMPETENCY MEASURE: CRYSTAL SET (RATINGS BY ALL FOUR GROUP MEMBERS)



GRAPH 2(a)

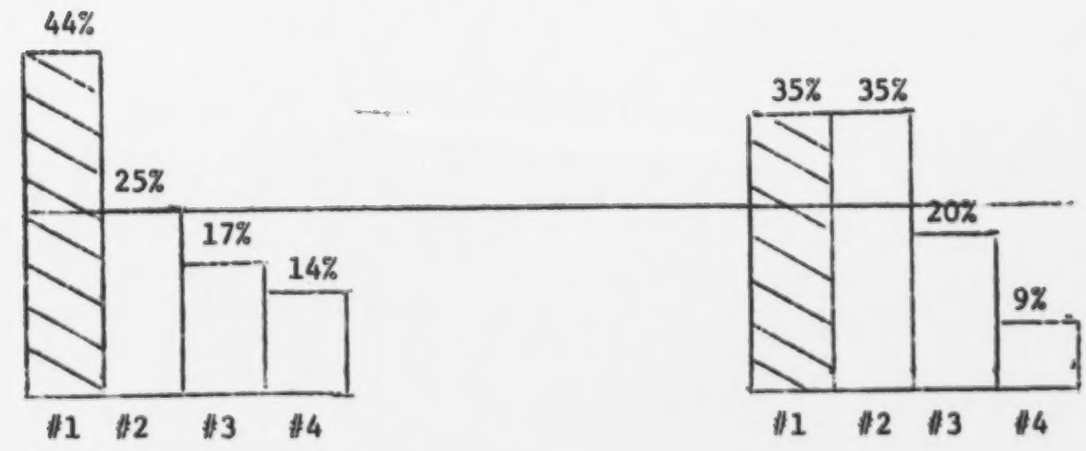
RATINGS GIVEN TO PERSONS FIRST IN INITIATION ON GAME 2

Blacks in Position #1 (N = 14)



GRAPH 2(b)

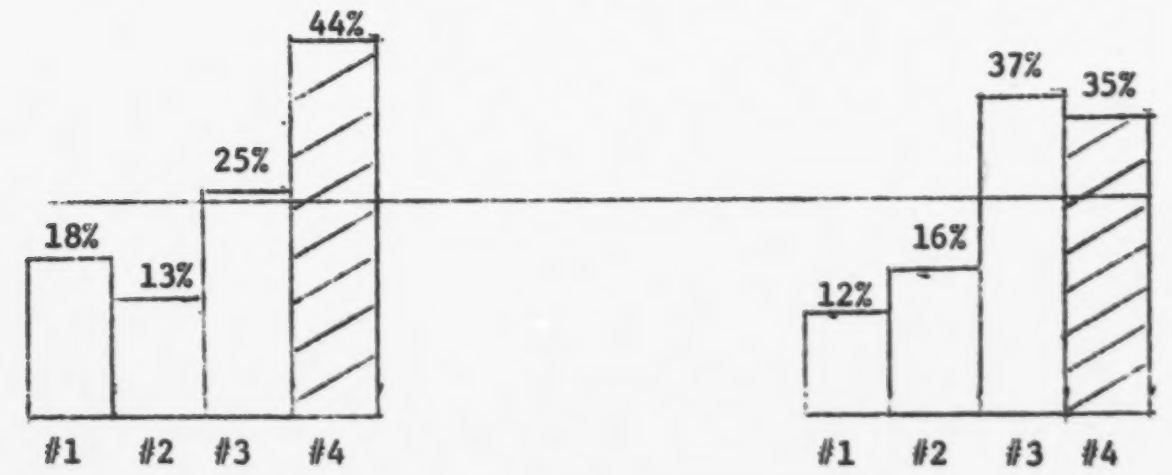
Whites in Position #1 (N = 25)



GRAPH 2(g)

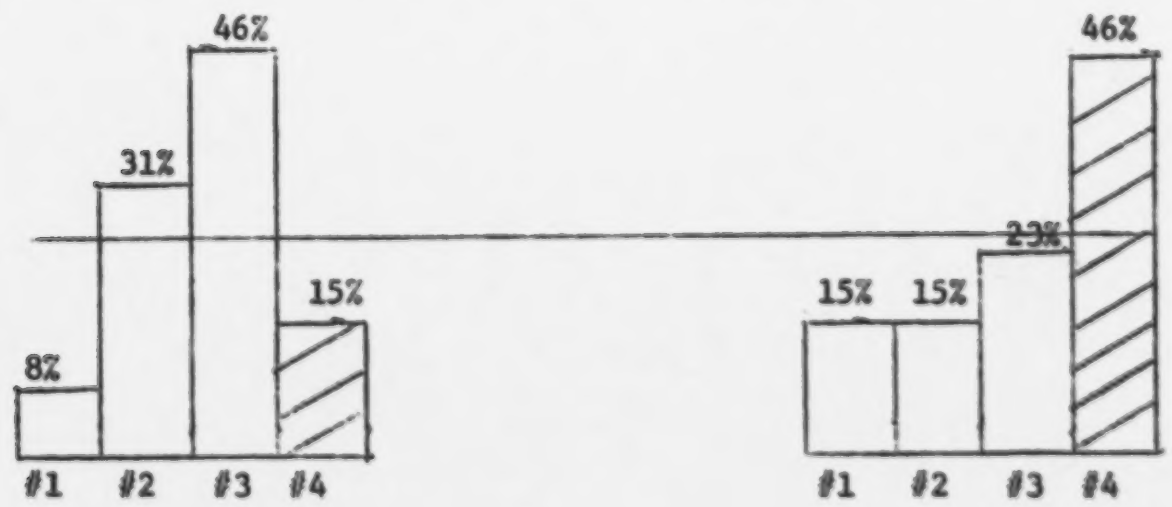
RATINGS GIVEN TO PERSONS FOURTH IN INITIATION ON GAME 2

Blacks in Position #4 (N = 32)



GRAPH 2(h)

Whites in Position #4 (N = 7)



2. Black rating of most active whites and most active blacks: Blacks are more likely to see the most active whites as most "helpful" than they are to see the most active blacks as being most "helpful" across both tasks.
3. White and black rating of least active blacks: Least active blacks are more frequently rated least "helpful" by black than by white raters on both tasks.
4. White and black rating of most active blacks: Most active blacks are less often perceived by black raters as being most "helpful" than they are by white raters across both tasks.
5. White and black rating of least active whites: Least active whites are less often judged by black raters as being least "helpful" than they are by white raters on both tasks.
6. White and black rating of most active whites: Most active whites are evaluated as most "helpful" more often by black than by white raters on both tasks.

Interpretation

The black pattern of rating can be summarized by the following two statements. When black and white subjects are of the same level of activity on both tasks according to the staff measure, then blacks consistently perceive black subjects as less helpful than they do white subjects. Similarly, given the same activity level according to staff

measures, black raters are more likely than white raters to see whites as helpful and less likely than white raters to see blacks as helpful.

This pattern of rating by black raters may be explained by the theory of diffuse status characteristics. According to the theory, a diffuse status characteristic is activated in situation S if both specific and general expectations are held by group members for one another and if these expectations hold the same value (i.e., high or low) as the diffuse status characteristic. In this experiment the diffuse status characteristic is race. The theory of diffuse status characteristics explains subjects' evaluations in this experiment if we assume the following:

1. Evaluations of "helpfulness" on the two tasks are indicative of subjects' expectations.
2. Subjects evaluated members of their own race consistently (i.e., on both tasks) higher or lower than members of the other race.
3. The evaluations hold the same value as the diffuse status characteristic.

The black subjects' pattern of evaluation may be interpreted as that they had both specific and generalized expectations for black and white members in their group. Their evaluation of "helpfulness" in the crystal set indicates that they expected black subjects to be less competent in building a crystal set than white subjects. The black subjects' evaluations of "helpfulness" in playing the game indicates that

they expected black subjects to be less competent than white subjects in playing the game. These evaluations, taken separately, indicate that blacks had specific expectations of black and white members in their group which influenced their perceptions of what happened in both tasks. The fact that these evaluations were consistent across two unrelated tasks indicates that black subjects possessed general expectations for black and white members in their group. The black pattern of evaluations is thus consistent with the predications of the theory of diffuse status characteristics when the diffuse status characteristic is activated.

The theory predicts that white subjects would hold the same low expectations for black subjects that blacks hold for themselves if the diffuse status characteristic is activated. The data do not support this prediction. The theory does not explain white ratings of either black or white subjects. However, we intend to investigate rating patterns in future studies because black evaluations showed a consistent pattern of bias in perception.

CHAPTER VI

BLACK-WHITE DIFFERENCES IN COMMUNICATION PATTERNS

In the previous and present study, we have noted the marked differences in tendencies for black and white subjects to initiate acts in one of our four categories. Aside from these differences, we would like to continue to pursue the question of whether there are patterned differences in the behavior of the races in activity and influence.

Communication Channels

In this analysis, we look at the number of acts flowing between actors of the same and different colors. The four possible combinations of race of initiator and receptor are referred to as "communication channels." When we look in Table 1 at the average proportion of acts flowing in the four types of channels, we find, exactly as in the previous study, that the proportion of acts in the Black-Black Channel is very low. Since there are only two potential actors in a within-race channel within one group, we compare the proportion of acts in the black-black channel to the proportion of acts in the white-white channel and find that it is typically less than half as much.

As in the previous study, we may ask the question whether this under-use of black-black channels is due to the low initiation rate of at least one of the blacks or is it due to some special tendency for the low status members to prefer high status members as targets for interaction?

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TABLE 1

MEAN PERCENTAGE OF ACTS OCCURRING IN FOUR COMMUNICATION CHANNELS UNDER TWO EXPERIMENTAL CONDITIONS AND A CONTROL CONDITION: BY COLOR OF INITIATOR AND RECIPIENT

Condition	N of Games	White-White	Black-Black	White-Black	Black-White
Long Control					
Game 1	10	26%	13%	31%	30%
Game 2	10	29%	8%	31%	32%
Long Experimental					
Game 1	13	24%	8%	34%	34%
Game 2	13	24%	10%	33%	33%
Short Experimental	17	22%	11%	33%	35%
Expected Means in Equal Status Groups*		16.7%	16.7%	33.3%	33.3%

*More acts would be expected to occur in the cross-racial channels than in within-race channels because in these channels there are four potential actors and recipients as compared to two in the within-race channels.

In order to answer this question, the observed results were compared to the results expected if the amount of initiation received were a direct function of the amount of acts initiated. Assuming that an actor chooses a target actor as a function of the target's initiation rate, predictions were made as to the order in which each player would use the three channels available to him. For example, with Group 10, Game 1, the rank order of initiation was: 1 = Bl_1, 2 = Wh_2, 3 - Wh_1, and 4 = Bl_2.

Theoretically, Bl_1 would direct the largest number of his communications to Wh_2, a smaller number to Wh_1, and the smallest number to Bl_2. Wh_2 would be expected to direct the largest number of communications to Bl_1, a smaller number to Wh_3, and the smallest number to Bl_2. For each game a table was made of the expected and observed order of usage for each communication link. Any discrepancy of one full rank order of usage or more was noted as an over- or under-use of that particular channel. Below is Table 2 showing how this comparison is made for Group 10, Game 1, as a sample.

TABLE 2

COMPARISON OF EXPECTED VS OBSERVED RANK ORDER OF USE OF COMMUNICATION CHANNELS BY EACH ACTOR IN GAME 1, GROUP 10

Actor	Communication Channel	Expected Order	Observed Order	Differential
Bl_1	$Bl_1 - Bl_2$	3	3	0
	$Bl_1 - Wh_1$	2	1	1 (Over-use)
	$Bl_1 - Wh_2$	1	2	1 (Under-use)
Bl_2	$Bl_2 - Bl_1$	1	1	0
	$Bl_2 - Wh_1$	3	2	1 (Over-use)
	$Bl_2 - Wh_2$	2	3	1 (Over-use)
Wh_1	$W_h1 - Wh_2$	2	2	0
	$Wh_1 - Bl_1$	1	1	0
	$Wh_1 - Bl_2$	3	3	0
Wh_2	$Wh_2 - Wh_1$	2	2	0
	$Wh_2 - Bl_1$	1	1	0
	$Wh_2 - Bl_2$	3	3	0

When a similar table was constructed for each game, it was possible to compute the number and percentage of times that channels of the four types were "over-used" and "under-used." In this way we can see patterns of usage of the Black-Black channel in comparison to other channels. For each type of channel, we can see the amount and direction of deviation from the usage that would be predicted on the basis of initiation rate of the target actor. See Table 3.

TABLE 3

PATTERNS OF USE OF COMMUNICATION CHANNELS IN EACH CONDITION: AMOUNT OF DEVIATION FROM WHAT WOULD BE EXPECTED ON THE BASIS OF INITIATION OF TARGET ACTOR

Condition	Channel Type	% Over-Used	% Under-Used	% as Expected	N of Channels
Control	Same Race--Bl-Bl	.10	.03	.87	40
	Wh-Wh	.05	.05	.90	40
	Cross-Race--Bl-Wh	.12	.15	.73	80
	Wh-Bl	.06	.09	.85	80
Long Experimental	Same Race--Bl-Bl	.10	.10	.80	52
	Wh-Wh	.12	.14	.74	52
	Cross-Race--Bl-Wh	.12	.09	.79	104
	Wh-Bl	.10	.09	.81	104
Short Experimental	Same Race--Bl-Bl	.15	.15	.70	34
	Wh-Wh	.12	.21	.67	34
	Cross-Race--Bl-Wh	.16	.15	.69	68
	Wh-Bl	.15	.12	.73	68

In no case does the Black-Black Channel appear to be under-used any more than White-White channels or Cross-Race Channels. In each row, the bulk of communication can be accounted for by the initiation rate of the target.

Interaction Income

As in the last study, we are interested in whether blacks of a given initiation rate receive as many acts as whites. By dividing the number of acts initiated by the number of acts received, we derive a statistic called "Interaction Income." The empirical generalization drawn from studies of small group interaction is that people who have higher activity rates will have a higher interaction income. In our previous study, we could see evidence for this generalization for both blacks and whites. In addition, in the middle ranges of initiation rate, whites received a higher interaction income than blacks. Table 4 finds the interaction income of each individual and strike a mean for each interval of initiation rate by race. The resulting picture is not too easy to interpret:

(1) There is not a steady increase in interaction income for whites as the initiation rate increases as there is for blacks.

(2) The superiority of white interaction income over black occurs in a slightly different range of initiation rate than in the last study (20-49 in this study as compared to 31-70 in the last study).

(3) Interaction income is slightly higher for very active blacks than for very active whites although the N's are small.

(4) Interaction income for very quiet whites is higher than for very quiet blacks.

The latter two findings were not present in the last study.

TABLE 4

MEAN INTERACTION INCOME FOR BLACK AND WHITE SUBJECTS: HOLDING CONSTANT NUMBER OF INTERACTIONS GIVEN

(Interaction Income = Acts Received/Acts Initiated x 100)

	Race of Actor			
	Blacks		Whites	
No. of Interactions Given	Mean Income	N	Mean Income	N
0-10	103.5	5	---	0
11-20	53.9	4	41.0	3
21-30	76.6	4	68.9	5
31-40	64.2	6	72.1	4
41-50	71.2	6	78.3	16
51-60	71.5	3	93.4	3
61-70	78.0	3	90.6	10
71-90	74.9	3	72.9	3
91+	---	0	82.6	3

The patterns in Table 4 differed considerably from the results of previous studies (studies in which race was not a variable). Since the N's were small in every cell, we were cautious in making interpretations from this table. We did note, however, that in the lower initiation rate ranges (below 30) the black got more acts relative to his investment than did the white. The trend was reversed in the middle ranges, with whites receiving more than blacks. In general, Interaction

Income rose with the number of acts given out, but the high incomes of low-initiating blacks puzzled us. We thought that perhaps it would be easy for one to receive more than he initiated if he had only given out three or four acts, especially when subjects had been instructed to arrive at a group decision in the game.

It was important to see if the same Interaction Income patterns would appear in the second study which involved a much larger sample. Using initiation intervals of ten acts (as in Table 4 above), we did not find the patterns repeated. This time, whites tended to receive more than blacks throughout the lower and middle ranges. Only at very high levels of initiation did blacks receive more income than whites. Also unlike the earlier study, subjects in the lowest intervals did not get surprisingly high incomes.

Such reversals made us feel that our puzzling findings may have been primarily due to the small N's in each cell. Even in the second study, the N's in many cells were quite small when we used initiation intervals of ten acts. For this reason, we decided to use wider initiation rate intervals in preparing Table 5, hoping that whatever pattern emerged would not be so subject to bias from small N's. Table 5 shows Interaction Income data from the present study.

At first glance, it appears that blacks are not getting their proper share of Interaction Income. Whites get larger returns than blacks in all but the top range, where the two races are essentially equal. However, before concluding that there is some special inhibition in responding

TABLE 5

MEAN INTERACTION GIVEN FOR FOUR INITIATION RATE INTERVALS: BY RACE OF SUBJECT

(Interaction Income = Acts Received/Acts Initiated x 100)

	Race of Actor			
	Blacks		Whites	
Initiation Interval	Mean Income	N	Mean Income	N
0-19	69.8	57	78.9	32
20-29	73.1	34	79.0	39
30-39	78.9	24	87.7	25
40+	89.6	15	89.5	34

to blacks, we decided to do one more analysis. We wished to check more carefully whether Interaction Income was actually related to race or whether it was more a function of basic initiation rate. We wondered whether the use of initiation rate intervals was obscuring a difference between the races in initiation rate within a given interval. If we found, for example, that blacks talked less on the average than whites within the first three intervals, we could attribute their lower incomes to their lower initiation rates. If, on the other hand, we found that blacks and whites had the same average initiation rates within a given interval, then we could say that blacks were, indeed, receiving less than they were giving out. Table 6 shows the mean number of initiations given out by blacks and whites in each interval.

Note that in all but the highest interval blacks initiate less on the average than whites. In comparing Tables 5 and 6, we are led to

CHAPTER VII

SUMMARY AND CONCLUSION

This experiment attempted to alter the effects of race as a diffuse status characteristic. An earlier study had demonstrated that white subjects tended to be more active and more influential than black subjects in playing a cooperative game of strategy. The experimental intervention took the form of a new task, the building of a radio crystal set. By means of differential instruction to the black and white subjects, we tried to produce "high competence" on the new task for black subjects and "low competence" for whites.

All subjects were seventh and eighth graders who did not know each other prior to the experiment. There were four men in each group, two white and two black. Subjects were matched within each group on socio-economic background and attitude toward school. Subjects were run under three conditions: Long Experimental, Short Experimental and Control. In the Long Experimental Condition, the boys played a round of the game, the black subjects saw a superior film during Expectation Training and before building the crystal set; the subjects then played the game once more. The procedure was the same in the Control Condition, but the blacks and whites both saw the less helpful film before building the radio. The Short Experimental was the same as the Long Experimental Condition, but the first round of the game was omitted.

It was hypothesized that the experience of being highly competent on a new and important task would alter the expectations of black subjects for performance on the game. They were expected to show increased initiation and influence rates. Likewise, the experience of finding themselves less competent on the new task than their black partners was to have altered the expectations of the whites for performance on the game. It was predicted that they would be less likely to dominate the game in activity and influence in the Experimental Conditions than in the Control Condition.

The results indicated that Expectation Training did not improve the activity or influence rate of black subjects as compared to their white partners. In the Long Experimental Condition there was little evidence of improvement in the game played after training as compared to the game before training. The Short Experimental Condition's games showed much the pattern as the Long Experimental Condition's second game, illustrating no particular effect of having played the game before training.

Examination of relative activity of white and black subjects during the crystal set task following Expectation Training showed that the two blacks were not uniformly more active than the two whites. Furthermore, there was a consistent tendency for blacks to underrate themselves and to overrate whites in helpfulness on the crystal set. These two findings suggest that the failure of Expectation Training was a function of weak assignment of "high" and "low" competence on the crystal set task. The desired differential in competence was not consistently produced and,

even when it was produced, the nature of the task and the bias in perception of the black subjects did not allow the necessary evaluation to take place.

The initial hypothesis concerning the effect of assigning "high competence" on a new task remains untested. In the next attempt to test this hypothesis, the following changes are necessary:

(1) The Expectation Training task must meet the requirement of interdependence of participants.

(2) Both black and white subjects must perceive that "high" and "low" states of the performance characteristic have been assigned.

(3) Assignment must be sufficiently clear so as to overcome the biases in black subjects' perception.

(4) There must be as many groups run in the Control Condition as in the Experimental Conditions because of variability in initial expectations of black subjects.

In review, the pattern of white dominance is a consistent and persistent finding in this series of studies. Alteration of this pattern will require a precise and powerful experimental intervention.

APPENDIX A

RECRUITMENT QUESTIONNAIRE

About this Job

The School of Education at Stanford is conducting a study with boys in grades six through eight in which you may be asked to participate. The study will last about an hour during which time you will be asked to play a game with three other boys whom you do not know. Each team will be composed of boys who have similar interests.

The attached questionnaire will be used to determine the team to which you will be assigned. The right answer is the one that tells how you feel. Please answer all the questions, place the completed questionnaire in an envelope and seal. Only the people working on the study will see your answers.

Thank you for answering the questions; and we hope to see you soon.

The Study Staff

Phone_____

Your name:_____ Age:_____
First Last

Your home address:_____
Number and Street Town

Your School:_____Your grade:_____

How tall are you? (If not sure, guess.)_____ _____
FEET INCHES

How many brothers and sisters live with you? (Count in half-brothers and half-sisters or foster ones.)

_____

How many adults live with you?_____

Do you have a hobby? Yes_____ No_____

IF YES: What is it?_____

Have you ever built any of the things in this list? If so check them.

Model cars_____

Slot cars_____

Model airplane_____

Erector set_____

Crystal Radio set_____

Transistor Radio set_____

Others_____

TURN TO NEXT PAGE

How boys your age feel about school

1. Do you or don't you <u>care</u> about the grades you get in school?

_____ (1) Care a lot
_____ (2) Care some
_____ (3) Care a little
_____ (4) Don't care at all

2. Do you or don't you <u>try hard</u> to get good grades in most of your subjects?

_____ (1) Don't try at all
_____ (2) Try a little
_____ (3) Try pretty hard
_____ (4) Try very hard
_____ (5) I get good grades without trying very hard

3. Does it or doesn't it <u>bother</u> you if you don't do well in your school work?

_____ (1) Bothers me a lot
_____ (2) Bothers me some
_____ (3) Bothers me a little
_____ (4) Doesn't bother me at all

4. Is it or is it not <u>important</u> to you to get good grades?

_____ (1) Not at all important
_____ (2) Not very important
_____ (3) Pretty important
_____ (4) Very important

How boys your age feel about going to a four-year college or to a university

1. Do you think you will graduate from high school?

_____ (1) Very sure I will
_____ (2) Pretty sure I will
_____ (3) Very sure I won't
_____ (4) Pretty sure I won't

2. Do you think you will go to college for at least 1 or 2 years? (To either junior college, 4-year college, or university)

_____ (1) Very sure I will
_____ (2) Pretty sure I will
_____ (3) Pretty sure I won't
_____ (4) Very sure I won't

3. Do you think you will finish 4 years of college or university?

_____ (1) Very sure I will
_____ (2) Pretty sure I will
_____ (3) Pretty sure I won't
_____ (4) Very sure I won't

4. Do you think you will finish more than 4 years of college or university?

_____ (1) Very sure I will
_____ (2) Pretty sure I will
_____ (3) Pretty sure I won't
_____ (4) Very sure I won't

Do you think your mother would be surprised:

a. If you finished high school? (1) Yes_____ (2) No_____

b. If you finished 2 years of college? (1) Yes_____ (2) No_____

c. If you finished 4 years of college? (1) Yes_____ (2) No_____

About your mother or the person taking her place

Answer these questions about your real mother if you live with her.
If you are not living with your real mother answer them about the person you live with who is supposed to be taking her place. It may be a stepmother, foster mother, an aunt, or somebody else.
If you don't live with your mother or with a woman who takes her place, skip the questions in this section.

1. How far did she go in school?

_____grade 6 or less
_____ grade 7, 8, 9, 10, or 11
_____ grade 12 (graduated high school)
_____ went to college but didn't finish
_____ finished college or more

2. Does she have a job outside the home?

_____yes, part-time
_____yes, full-time
_____yes, only in the summer
_____no, she does not work outside the home

3. If she has a job, what is her job? She_____
_____ She does not have a job.

About your father or the person taking his place

Answer these questions about your real father if you live with him.
If you are not living with your real father answer them about the man you live with who is supposed to be taking his place. It may be a stepfather, foster father, an uncle or somebody else.
If you don't live with your father or with a man who takes his place you can skip the questions in this section.

1. How far did he go in school?

_____grade 6 or less
_____grade 7, 8, 9, 10, or 11
_____grade 12 (finished high school)
_____went to college but didn't finish
_____finished 4 years of college or more

2. Most of the time does he work for himself or for somebody else?

_____works for himself or has his own business
_____works for somebody else
_____I don't know what he does

3. What is his work or job most of the time?

He_____

Instructions for Coding Level of Aspiration on Questionnaires

General:

A. Be sure "B" or "W" for race is marked on top of first page.

B. Check first to see if parent education and occupation are so high that it is automatically coded High SES.

I. Page 3 of Recruitment Questionnaire

A. On the first three (3) questions put a "1" if the answer is number 1 (Very sure I will). On question 4 put a "1" if the answer is either number 1 or number 2 (Very sure I will or Pretty sure I will). Put a "0" if anything other than these responses are chosen.

B. Then assign a scale score in this way: Add the total for all four questions.

Range = 0-4
High = 3-4
Medium = 1-2
Low = 0

C. Write High LOA, Med LOA, or Low LOA beside the pattern.

D. If the score is High (3 or 4) check into "Mother Surprised" questions for consistency.

II. Page 2 of Recruitment Questionnaire

A. Put a "1" if the answer to question 1 is number 1 and a "1" if the answer to question 2 is either number 4 or number 5. Questions 3 and 4 are coded as one question. They are to be coded "1" if the answer to question 3 is number 1 and the answer to question 4 is number 4. All other responses are coded "0".

B. Then assign a scale score in this way: Add the total for the four questions.

Range = 0-3
High = 3
Medium = 2
Low = 1

C. Write High School, Med School, or Low School beside the pattern.

III. Rules for Overall Coding

A. If Mother and Father have 4 years of college or more, and father is employed as higher executive, proprietor, major professional, lesser professional, business manager, proprietor of medium-sized business, subject is automatically called High SES. Circle that and note on front page.

B. If one subject is High on 3 of the following 4 factors:

a. High LOA
b. High School Adjustment
c. High parent education (Father has 4 years of college or more and Mother has some years of college or more).
d. Father has any white collar occupation.

THEN call High SES on front of questionnaire and encircle.

C. If subject is Low on 3 of the following 4 factors:

a. Low LOA
b. Low School Adjustment
c. Mother or Father less than a high school education.
d. Father (or Mother if Father is absent) works at unskilled labor.

THEN call Low SES on front of questionnaire and encircle.

D. All other cases will be called Middle SES and will be so labeled on front of questionnaire.

APPENDIX B

SCRIPT FOR RADIO

End Game Round #1

Host: Now we're going to do something different. You're going to build a crystal radio set. Each of you will receive information about radios. To get the information, each man will watch a TV set by himself, so let's draw numbers to see where each of you will go.

(Host has boys choose numbers 1-4, then jots down which boys have which number. He always allocates blacks and whites to different rooms, but does it by saying:)

Host: OK, 3 & 4 (eg) stay here and 1 & 2 (eg) come with me.

(Take blacks to other room.)

Boys should be seated at table with partition between them.

Host: Please put on your head sets. Watch the TV and follow along with the parts in front of you. (Host returns to whites.)

(Host removes whites to adjoining room.)

Host: Please put your head sets on and watch the TV carefully. Please don't talk.

(There is a monitor in each room. When TV is finished, monitor leaves briefly and then returns. Host enters blacks' room.)

After Film

Host: Please take your head sets off and come with me. We're now going to build the crystal radio.

Radio Script #2

(Monitor leads white kids out by back door--all meet in hall.)

Host: Please choose a card to determine seating arrangement.

(Seats kids--eliminates card chosen.)

Kids are ready to build radio

Host: Here are written directions for building the crystal set. Use them if you wish, but many fellows find they can build the radio without using the directions. You may now begin.

Crucial statement

After set is built

(Host enters to check set to see if it will work. If they want to listen for a while, let them. Then host listens to set.)

Host: Hey, it really works. You fellows all did a good job. Now we're going to take a break. Will you all follow me and move through the halls quietly.

Kids return for Round #2

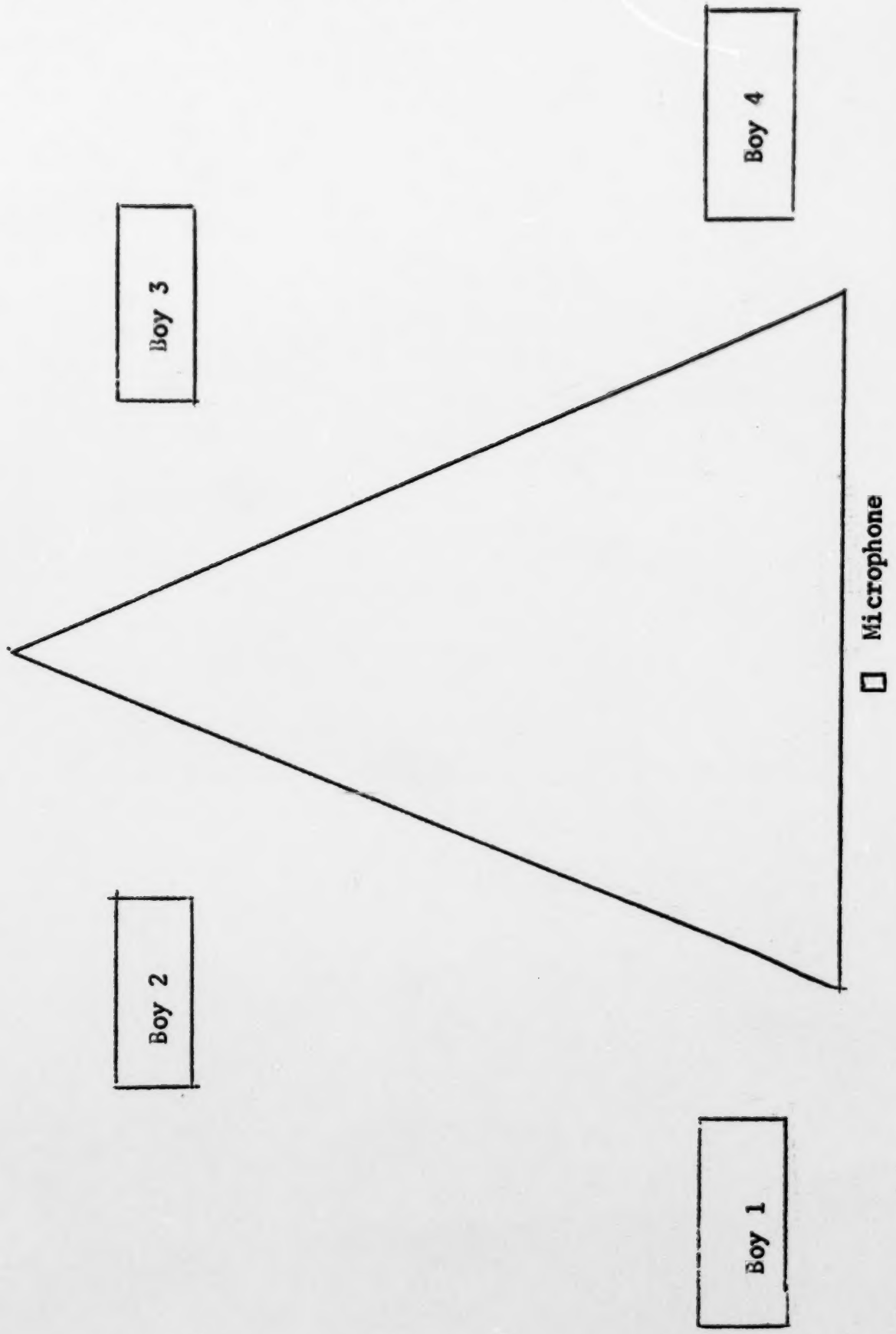
Host: Please choose a card to determine seating arrangement.

(Seats kids.)

Host: Behind this card is our special score. Your group is going to have 2 chances to get over this score. If you make more points than this score on either game, you'll get a bonus. If you get over it on both games you'll get a double bonus.

APPENDIX C

SEATING ARRANGEMENT FOR GAME AND CRYSTAL SET



APPENDIX D

POST MEETING QUESTIONNAIRE

Date_____ Subject and #_____

Interviewer_____

1. Did you find that the film was helpful? Did it confuse you?

2. Was it important to you to help build the radio and play the game? Would you say it was very important, fairly important or that it did not matter one way or the other?

3. a. Here is a picture of where each of you sat while building the radio. In building the radio, which fellow was the most helpful? the next most helpful? the third most helpful? the least helpful?

   b. Here is the same diagram. This time we want to know about the last round of the game. In playing the game, which fellow was the most helpful? the next most helpful? the third most helpful?

   c. Of the other three fellows, which one did you like the most? the next most? the least?

4. How do you feel about this study, did you ever feel at a disadvantage?

5. Did anything make you angry at any time?

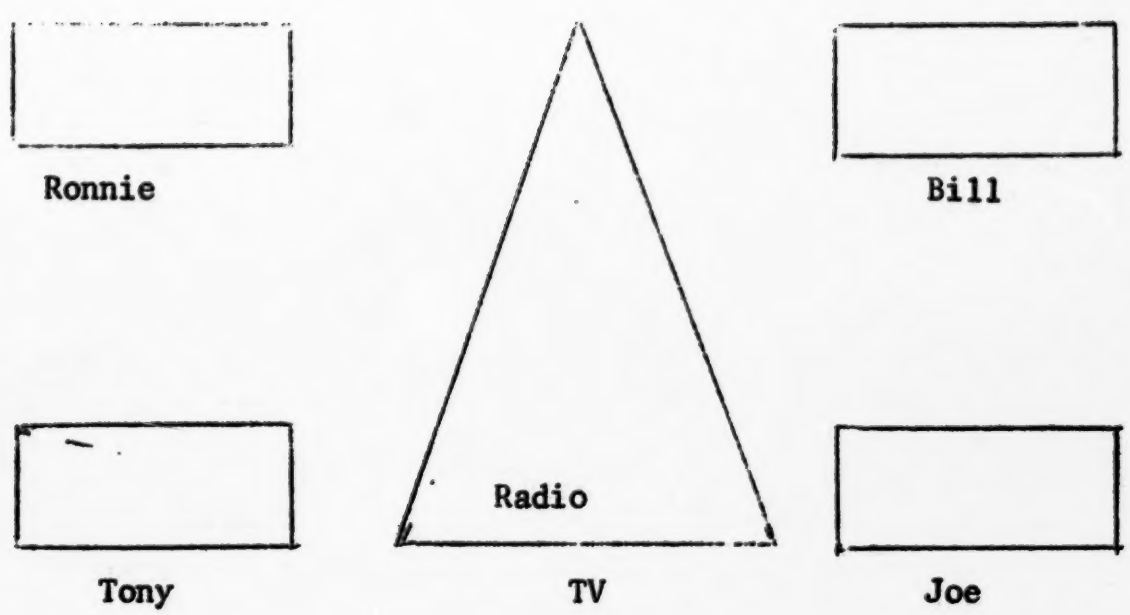
   If the answer is yes, tell subject:

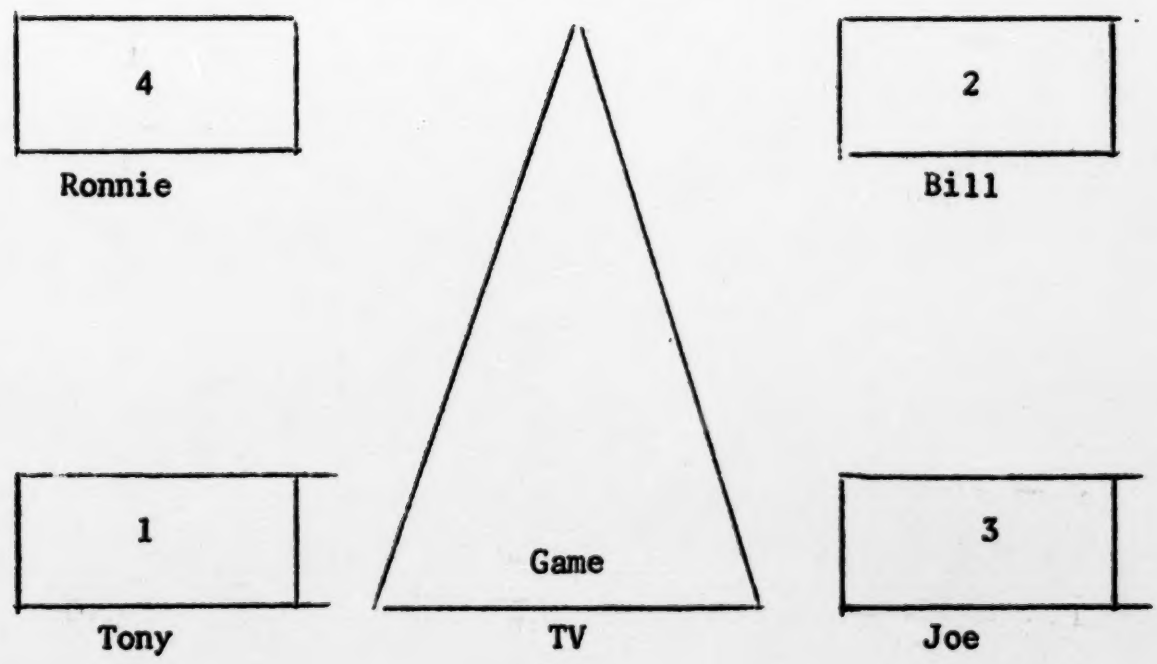
   You may have seen the film that was not as helpful as the other. Many of the fellows find that the film you saw did not help them very much. So don't feel bad because we realized this and took it into consideration.

6. Would you consider coming back and helping us with another study?

7. Is there anything you would like to add or say about all this?

8. Thank you for helping us today.


Ronnie
Bill
Radio
Tony
TV
Joe


4
2
Ronnie
Bill
1
Game
3
Tony
TV
Joe

APPENDIX E

SCORING MANUAL FOR OBSERVERS

Rules for Scoring

Performance Output

An uninterrupted verbal statement in which an actor

1. Demonstrates a particular path should be followed

   Examples: Let's go this way, and then here
   Let's follow this route

2. Indicates in path (He has previously chosen) the costs and rewards of a particular direction.

   Examples: This path has a +300 score and a +500 score.
   Let's get the double plus values over here.
   This path has three blue values and 3 red values.

3. Presents a general strategy for the group to follow

   Examples: Move to the outside and get the big scores.
   Head toward the goal now.
   Get as many double pluses as possible.

Action Opportunities - Socially distributed chance to perform.

1. To Others

   Direct asking of opinion or advice without mention of a strategy.

   Examples: What do we do now?
   What's your opinion?
   Where should we go?

2. To Self

   Stopping the process of decision-making in order that an actor may perform.

   Examples: Wait a minute,
   Hold it,

Positive Evaluation

1. Showing agreement for a particular strategy.

   Examples: Yes, that's a good path
   Let's go this way
   I agree

2. Pointing out positive values of path indicated by someone else.

   Examples: Look at those ++ (double pluses)
   That path has a +600 on it.

3. Praising strategy or behavior of another player.

   Example: I like your ideas.

Negative Evaluation

1. Pointing out negative values in someone else's strategy.

   Example: Yeah, but look at this: -80 and -50

2. Disapproval of an idea or strategy suggested by another actor.

   Examples: Let's not go that way
   That path is risky
   Let's stay away from that hot path

3. Criticizing the behavior or performance of another player.

   Example: Don't listen to him

Directions for Scoring a Tape

1. Watch the entire tape through with a copy of the board game in front.

2. Follow the moves of the game as players proceed to play.

3. Then, return to beginning of game and begin to score. Score one complete move or decision at a time. Then stop tape, if desired, and when ready, go on to the next move.

   Do Not, Do Not, go over a turn again, and re-score any or all of a past decision.

4. Return data to 528 Alvarado House, 1-5 P.M. daily, Monday-Friday.

CLARIFICATION OF NEGATIVE EVALUATION SCORING CATEGORY

The object of scoring an act as a negative evaluation is to indicate that it was a disagreement with, or an attempt to lower the status of another person. The scoring rules are designed to reflect this underlying idea. If you have difficult situations to score, ask yourself whether or not the act meets these criteria better than the criteria for any other category.

In general, an act is scored as a negative evaluation when a person reacts negatively to another actor or another actor's idea:

a) points out negative values in someone else's strategy;

b) disapproves of an idea or strategy suggested by another actor;

c) criticizes the behavior of another player.

Specifically, it has been decided to use the following guidelines in scoring:

1. If the response to an action opportunity is simply "no" or some alternative suggestion, it would be scored as a performance. But if the response includes an attack on the person or in some other way lowers his status, then it would be a negative evaluation.

2. If it is ambiguous to whom a negative evaluation is directed, give priority to the context. For example, if A looks at B in giving a negative evaluation of something said by C, use the priority rule of B, i.e., give the negative to C, not B.

Some examples of categories of acts could be the following. There is an element of subjectivity in making choices between categories, but using the criterion of lowering status seems to suggest these scores:

1. Let's go this way - Perf.
2. No, look at all the minuses - Neg.
3. This way looks like a good way - Perf.
4. I like the hot line better - Neg.
5. No, the hot line is a foolish idea - Neg.

APPENDIX F

SAMPLE MATRIX

Group 20

Tape 599
Observer Karen

Game 2

	Bl-1 1	Bl-2 2	Wh-1 3	Wh-2 4	5		
Bl-1 1		+ - - - - 1 + 4 - (5)	- p p p + + + p p + + + p + p + - - 7 p 8 + 3 - (18)	p + - - + p p p - - - p - - 5 p 2 + 7 - (14)	p 1 p (1)		38
Bl-2 2	+ - - - - 1 + 4 - (5)		+ p - - + + + + + - + - A - p + 2 p 1 A 8 + 5 - (16)	p - p - - 2 p 3 - (5)			26
Wh-1 3	+ + + + - p p + p A A - - 3 p 2 A 5 + 3 - (13)	- + p - - A + A + - + 1 p 2 A 4 + 4 - (11)		+ + p + p + - + - - p p - - p + p - - A p + - p p 9 p 1 A 7 + 8 - (25)	p p p 3 p (3)		52
Wh-2 4	A - - p + + + - + - p 2 p 1 A 4 + 4 - (11)	- + + + - 3 + 2 - (5)	p - + + A + p + + p - + + - + + + + + p p + + + - + A 5 p 4 - 2 A 16 + (27)		p 1 p (1)		44
	29	21	61	44	5		N = 160

APPENDIX G

RULES FOR SCORING THE COMPETENCY MEASURE

Scoring is done during a ten second time interval with twenty second non-scoring periods in between. The use of a stop watch is helpful. The stop watch should begin after the host experimenter has handed out the instructions and told the fellows to begin building. After a 20 second interval the timer should say, "Look," and after ten seconds has elapsed the timer should say, "Stop."

During the ten second scoring interval a participant may only receive one score no matter how much he accomplishes in that time. Each person is scored once for touching the top or bottom side of the building platform. By touching it is meant that the participant is making some kind of gross attempt to construct some part of the radio crystal set. No attempt is made to decide whether or not a particular move was helpful or not. On the other hand accidental placing of hand on the set or playing with a part attached to the set is not scored if the gesture can not be construed in any was as aiding the building of the crystal set.

During some intervals it may be the case that a participant is not doing anything constructive with his hands toward building the set. In general we are making no attempt to score verbal interaction or verbal suggestions. If however an individual takes the directions and reads some information from them which leads to a direct suggestion about building some part and further leads to some kind of gross attempt at moving the part, then the participant who read the directions and gave the instruction receives a competent score even if he himself does not carry out the prescribed behavior. When such a case occurs an asterisk should be placed in the margin just above the individual's number who received a score on this basis.

APPENDIX H

SCOPE CONDITIONS OF THE THEORY

Four conditions are required for activating the diffuse status characteristic. (Berger, Cohen, Zelditch, 1966) First, members of the group must perform a collective and valued task which means they must take into account each other's behavior and the different outcomes of the task can be viewed as successes or failures.

Second, the task must require some form of ability such that one state of the ability is more likely to lead to a successful outcome than another state of the ability.

Third, it is assumed that no one has ever previously associated the ability to do the task with any of the members of the group.

Fourth, members of the group are assumed to be differentiated on the basis of a single external status characteristic. These conditions form the important scope conditions of the theory. The procedure section of this thesis discusses how each condition has been met in the current study.

APPENDIX I

Influence Measure

The influence measure is scored by two independent observers. It consists of two parts; unique suggestions and paths followed. Unique Suggestions are scored each time a participant explicitly proposes a path or strategy for the group to follow. This may be done by either suggesting a path verbally or by pointing out a path non-verbally. Paths Followed are scored each time the group agrees to follow someone;s unique suggestion as the group path. This measure is taken on each move of each game. If one subject suggest a path and another adds something new to his suggestion, both are scored as having made unique suggestions.

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